

# **EXHIBIT 2**

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION  
ORACLE AMERICA, INC.,  
Plaintiff,  
vs. Case No. 3:10-cv-03561-WHA  
GOOGLE, INC.,  
Defendant.

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VIDEO DEPOSITION OF RODERIC G. CATTELL, Ph.D.  
San Francisco, California  
Saturday, April 30, 2016  
Volume I

REPORTED BY:  
REBECCA L. ROMANO, RPR, CSR No. 12546  
JOB NO. 2303261  
PAGES 1 - 217

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<p>1 let me know. It's no -- no problem.  2 A. Yes.  3 Q. I try to take them pretty regularly, just  4 for all of our sakes.  5 A. Yes.  6 Q. I think that's about all that comes to  7 mind.  8 Your -- your counsel will probably object  9 from time to time today. Unless your counsel  10 instructs you to answer and says don't answer, you  11 should simply --  12 A. Okay.  13 Q. -- wait for the objection and then  14 answer.  15 Is there any reason why you can't give  16 your best and most truthful testimony today?  17 A. No, I don't believe so. I -- I am  18 just -- my -- my voice is weak because I've had  19 tubes down my throat for -- for pancreatitis and  20 everything, so -- and I'm not supposed to wear  21 myself out too much or I might get a recurrence of  22 the pancreatitis, but I'm -- I'm good for a few  23 hours. So that's all we can do.  24 Q. Okay. Well, I -- I hope not to take the  25 whole day. I do have a number of questions --</p> <p style="text-align: right;">Page 10</p>	<p>1 So preliminary discussions that may have been about  2 other things --  3 THE DEPONENT: Yes.  4 MR. KWUN: -- those would be privileged.  5 But if you want to talk about what is in your  6 report, what we --  7 THE DEPONENT: Yes.  8 MR. KWUN: -- what we engaged you for,  9 that's fine.  10 THE DEPONENT: Okay. In my report, I --  11 I talk about the fair use of the APIs in question.  12 Q. (By Mr. Ramsey) Did you actually write your  13 report?  14 A. Yes.  15 Q. Did you create the first draft?  16 A. Yes.  17 Q. Did you provide it to others for review  18 and comment and editing?  19 A. Yes, others at -- at Michael's  20 organization.  21 Q. Okay. Did you provide it to any others,  22 beyond the Kecker &amp; Van Nest law firm, for review  23 and comment?  24 A. No.  25 Q. So did -- about how many estimates,</p> <p style="text-align: right;">Page 12</p>
<p>1 A. Yeah.  2 Q. -- but I -- I will bear that in mind.  3 A. Okay.  4 Q. Thank you for letting me know.  5 So one more question. Will you agree to  6 be intellectually honest with me today?  7 A. Yes.  8 Q. Okay. Thank you.  9 So you understand you -- you have  10 submitted an expert report in this case?  11 A. Yes.  12 Q. When did you -- when were you first asked  13 to prepare an expert report in -- in this case?  14 A. Oh, I don't remember -- it was -- it was  15 in the second half of last year, I'm -- I'm going  16 to -- I'd be guessing right.  17 Q. Okay.  18 A. Maybe November.  19 Q. Okay. And -- and what particularly were  20 you asked to opine about?  21 A. On the copyright -- well, originally, it  22 was -- sorry.  23 MR. KWUN: Objection. Just going to  24 caution the witness not to discuss things beyond  25 the scope of the engagement that you actually had.</p> <p style="text-align: right;">Page 11</p>	<p>1 estimating, did you exchange back and forth with  2 the law firm?  3 MR. KWUN: Objection. Form.  4 You can go ahead and answer.  5 THE DEPONENT: I can go ahead.  6 Q. (By Mr. Ramsey) Yeah. You will hear that --  7 A. I don't remember exactly, you know.  8 Maybe half a dozen or -- or more.  9 Q. Okay. So -- so how would you describe  10 your basic opinion in this case? What is your --  11 what is your high-level opinion?  12 A. My high-level opinion is that -- that  13 Android's use of the Java API should be a fair use  14 of copyrighted materials, given that they've  15 been -- they -- they've decided that they can be  16 copyrighted, the court has decided.  17 Q. Okay. But you don't mention in your  18 report -- as far as I can see, you don't ever  19 mention the -- the law about fair use; isn't that  20 true?  21 A. Well, I'm not an expert on -- on the law.  22 I'm an expert on computer science. So my arguments  23 are based on what -- what I know about computer  24 scientists and -- and the history and the  25 expectations and on.</p> <p style="text-align: right;">Page 13</p>

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<p>1 Q. Okay. But the lawyers at Keker Van Nest 2 never gave you the law to include in your report as 3 a legal framework? 4 MR. KWUN: Objection. You can talk about 5 what you relied on in forming your opinions. 6 THE DEPONENT: Yes. 7 MR. KWUN: But other than that, you -- 8 I'm instructing you not to answer, to the extent 9 that it would reveal your discussions with counsel. 10 THE DEPONENT: Okay. Well -- 11 MR. RAMSEY: Let me reframe my question. 12 I'm not sure I agree with the objection, but table 13 that for now. 14 Q. (By Mr. Ramsey) In your expert report, I -- 15 I see no place where you state the -- any legal 16 framework for assessing the other factual issues that 17 you discuss in your report; isn't that right? 18 A. Yes, correct. 19 Q. So while you just stated you have an 20 opinion about fair use, it's true that in your 21 report, which is the full statement of your 22 opinions, you -- you've not actually mentioned the 23 legal framework for fair use at all? 24 MR. KWUN: Objection. Form. 25 THE DEPONENT: Should I not -- not answer</p> <p style="text-align: right;">Page 14</p>	<p>1 implementation using none of the original code, but 2 to produce the same kind of result -- the same 3 input and output with a completely different 4 implementation. 5 Q. All right. You -- is it correct to -- to 6 state that your report put forths your -- puts 7 forth your opinion about what computer scientists 8 would think about the elements of fair use? 9 MR. KWUN: Objection. Form. 10 THE DEPONENT: In this case, yes, I'm 11 saying what -- I can't recite them off the top of 12 my head, but as I understand there's four main 13 elements on -- in the fair use and -- and I'm -- 14 and I'm only commenting on my understanding of the 15 technology and the industry and how that would 16 relate to those. 17 MR. RAMSEY: All right. Let's go ahead 18 and mark your report. 19 (Exhibit 5167 was marked for identification by 20 the court reporter and is attached hereto.) 21 Q. (By Mr. Ramsey) You've been handed 22 Exhibit 5167. 23 A. Yes. 24 Q. Do you agree that Exhibit 5167 is a copy 25 of your expert report in this case?</p> <p style="text-align: right;">Page 16</p>
<p>1 the question? 2 MR. KWUN: You should answer the 3 question, unless I instruct you not to answer. 4 THE DEPONENT: Okay. All right. So I -- 5 Q. (By Mr. Ramsey) You may hear "form" over and 6 over and that's -- that means you should answer -- 7 A. Okay. 8 Q. -- unless Michael disagrees with you. 9 A. All right. So, yes, I -- I -- I've read 10 about the law and I've heard about the laws 11 regarding fair use. And although I don't talk 12 about those laws in my expert report, most of the 13 things in my expert report are based on my 14 understanding of what would make it fair use. 15 And, therefore, I expounded on, for 16 example, what -- what computer scientists would -- 17 would think about the elements of the fair use. 18 Q. Okay. When you said "what computer 19 scientists will think about the elements of fair 20 use," which elements are you referring to? 21 A. Well, since I don't have the law in front 22 of me, I can't -- I -- I -- I'm specifically 23 thinking that the expectations would be that -- 24 that -- that it would be fair use to -- to use an 25 API and re-implement it. And with a new</p> <p style="text-align: right;">Page 15</p>	<p>1 A. Yes, it appears to be. 2 Q. Okay. If you could please turn to 3 page 6 of the expert report in front of you. 4 So do you agree that the summary of your 5 opinions is set forth between paragraphs 28 and 31 6 of your expert report? 7 A. Yes. 8 Q. And beyond the -- these opinions, did -- 9 articulated in your report, you don't intend to 10 offer any other opinions in this case? 11 MR. KWUN: Objection. Form. 12 THE DEPONENT: I might offer more 13 opinions, depending on what you ask me. 14 Q. (By Mr. Ramsey) Okay. So has -- have you 15 been asked to -- to render any opinions beyond at trial 16 what -- what is beyond what's in your report? 17 A. No. 18 Q. Okay. So if I understand it correctly, 19 your -- your basic view is that computer scientists 20 would expect to be able to reuse, for example, the 21 method declarations in this case? 22 A. Yes. 23 Q. And do -- what do you base that on? 24 A. Well, in my 35 to 40 years in computer 25 science, working with lots of companies, lots of</p> <p style="text-align: right;">Page 17</p>

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<p>1 people on lots of APIs in various contexts, I've 2 dealt with many, many people and many companies 3 about re-implementing APIs. 4 And with -- with some exceptions, the 5 general accepted practice, I believe, is that an 6 API is not copyrightable, although it sounds like 7 the court has decided otherwise now. 8 And that even if it were, that it would 9 be fair for somebody to implement the same API with 10 their own code, a clean room implementation, not 11 copying any of the original. 12 Q. It's true that you never carried out a 13 formal survey of Java -- 14 A. Yes. 15 Q. -- developers; isn't that true? 16 A. I haven't carried out a formal survey, 17 no. It's just based on 40 years of talking to 18 people. 19 Q. All right. You -- you would agree with 20 me that in the world today there are approximately 21 9 million Java developers? 22 MR. KWUN: Objection. Form. 23 THE DEPONENT: I -- I can't quote the 24 number. 25 Q. (By Mr. Ramsey) Do you think it's a fair</p> <p style="text-align: right;">Page 18</p>	<p>1 Q. And when you were work- -- working at 2 Sun Microsystems, you worked on database 3 technologies, correct? 4 A. Yes. 5 Q. You worked on aspects of Java EE; isn't 6 that true? 7 A. Yes. 8 Q. But when you were at Sun, you did not 9 work on Java SE or Java ME; isn't that true? 10 MR. KWUN: Objection. Form. 11 THE DEPONENT: I would say that I did 12 work on them in the sense that I kibitzed on 13 various designs that were part of Java SE with my 14 colleagues that were in the same building. We were 15 all in the same building on -- in Java Soft. 16 Q. (By Mr. Ramsey) Did you have a -- you had no 17 formal role on the Java SE team at Sun; isn't that 18 true? 19 MR. KWUN: Objection. Form. 20 THE DEPONENT: Well, I was one of the two 21 distinguished engineers in the Java Soft group that 22 were thought leaders on where we were going and 23 what we were doing. So I -- I focused mostly on 24 databases and Java EE, and certain other things 25 that I had some background in, like collections.</p> <p style="text-align: right;">Page 20</p>
<p>1 assumption that there are millions of Java developers 2 in the world today? 3 A. Yes. 4 MR. KWUN: Ob- -- objection. Form. 5 Q. (By Mr. Ramsey) Is your answer "yes"? 6 A. Yes. 7 Q. Okay. You have not conducted any 8 empirical survey of the millions of Java developers 9 in the world today to -- and presented the results 10 of that in your report; is that true? 11 A. That's true. 12 Q. You did no statistical analysis of the 13 views of software developers -- Java developers in 14 your report; isn't that true? 15 A. That's true. 16 Q. Do you -- do you program in Java for Java 17 language today? 18 A. Not -- not recently. But, yes, I have 19 programmed in the Java programming language. 20 Q. How long has it been since you programmed 21 in the Java programming language? 22 A. I'd say two or three years. 23 Q. You were at Sun Microsystems in the 24 1980s, 1990s, and up to about 2007, right? 25 A. Yes.</p> <p style="text-align: right;">Page 19</p>	<p>1 So I don't know how to answer your question 2 exactly. 3 Q. (By Mr. Ramsey) Well, my question was, you 4 have -- you had no formal role on the Java SE team at 5 Sun; isn't that true? 6 MR. KWUN: Objection. Form. 7 THE DEPONENT: Yeah, I don't know how -- 8 what a formal role would be exactly because we were 9 pretty informal in Java Soft. But, no, I don't 10 have a -- I didn't -- it wasn't in my title. 11 Q. (By Mr. Ramsey) And if you could please take 12 a look at your expert report. 13 A. Okay. 14 Q. I notice that there's no list of 15 material -- materials that you considered as the 16 basis for your expert report. 17 A. Yes. 18 MR. KWUN: Objection. Form. 19 THE DEPONENT: Yes. 20 Q. (By Mr. Ramsey) And do you agree with me 21 that all of the materials that you used to -- to form 22 the basis of your opinions are set forth in the body of 23 your report? 24 A. Yes. If I had to list all the materials 25 that formed my opinion over the last 40 years, it</p> <p style="text-align: right;">Page 21</p>

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<p>1 would be a very long list.</p> <p>2 Q. Okay. What do you mean by that?</p> <p>3 A. Well, I mean all of the email</p> <p>4 communication and API documents and -- and,</p> <p>5 you know, trade, rag articles and so on that are</p> <p>6 the basis for my opinion of the industry's</p> <p>7 expectations and -- and mode of operation.</p> <p>8 Q. Do you believe that there's any</p> <p>9 individuals in the software development community</p> <p>10 who believe that method declarations in Java should</p> <p>11 be protectable by copyright and not fair use?</p> <p>12 MR. KWUN: Objection. Form.</p> <p>13 THE DEPONENT: I can't name a specific</p> <p>14 person. But I believe that there are some people</p> <p>15 that agree that API should be copyrightable;</p> <p>16 otherwise, there wouldn't be this lawsuit.</p> <p>17 Q. (By Mr. Ramsey) Right.</p> <p>18 A. Yes.</p> <p>19 Q. So you agree with me that in the Java</p> <p>20 community there may be differing views, honest</p> <p>21 debate about whether APIs and method declarations</p> <p>22 are fair use or not?</p> <p>23 A. Yes. All I can say is most people I know</p> <p>24 don't think they should be copyrightable and thinks</p> <p>25 that it should be a fair use.</p> <p style="text-align: right;">Page 22</p>	<p>1 tell the Supreme Court that it should not be</p> <p>2 copyrightable, pretty much every one of the</p> <p>3 arguments applies to the same point, that it should</p> <p>4 be a fair use, even if they are copyrightable.</p> <p>5 Q. Right.</p> <p>6 Do you understand that the court of</p> <p>7 appeals for the federal circuit has found that the</p> <p>8 API declarations at issue in this case are</p> <p>9 copyrightable? Correct?</p> <p>10 A. Yes, that's my understanding.</p> <p>11 Q. And you -- you understand that it's</p> <p>12 appropriate to follow the law?</p> <p>13 A. Yes. I think they were wrong, but we</p> <p>14 have to follow the law.</p> <p>15 Q. Okay.</p> <p>16 A. But -- but all I'm saying is that these</p> <p>17 same arguments show that these 75 or 77, whatever,</p> <p>18 of the most prominent computer scientists agree</p> <p>19 with the point that -- about fair use indirectly</p> <p>20 here even though they were talking about the</p> <p>21 copyrightability.</p> <p>22 Q. All right. Did you talk about every one</p> <p>23 of the 75 --</p> <p>24 A. No.</p> <p>25 Q. -- software engineers that signed on to</p> <p style="text-align: right;">Page 24</p>
<p>1 Q. Okay. In forming your opinions in your</p> <p>2 report regarding expectations of developers, did</p> <p>3 you interview any software developers in</p> <p>4 particular?</p> <p>5 MR. KWUN: Objection. Form.</p> <p>6 THE DEPONENT: Since I wasn't allowed to</p> <p>7 talk to anybody about this case, once I signed up</p> <p>8 to be an expert, I wasn't in a position to go out</p> <p>9 and interview people about this particular debate.</p> <p>10 Q. (By Mr. Ramsey) Okay.</p> <p>11 A. But, you know, in -- in -- over 40 years,</p> <p>12 I -- I was privy to what people's opinions were in</p> <p>13 various companies and forums.</p> <p>14 Q. Okay. Are you able to name a -- a -- a</p> <p>15 single particular member of the Java development</p> <p>16 community that you've talked with that opined to</p> <p>17 you that the use of the method declarations should</p> <p>18 be fair use?</p> <p>19 A. I participated and was an author in this</p> <p>20 amicus brief to the Supreme Court on this, and</p> <p>21 there were 75 of the most prominent computer</p> <p>22 scientists involved in this.</p> <p>23 And if you read the report, you see</p> <p>24 pretty much they all agree with the point --</p> <p>25 although the -- the point of this report was to</p> <p style="text-align: right;">Page 23</p>	<p>1 the brief that you signed on to?</p> <p>2 A. No. I -- I do know that they signed --</p> <p>3 sorry. Go ahead.</p> <p>4 MR. KWUN: And just -- just a reminder,</p> <p>5 Dr. Cattell, that if you could wait for the</p> <p>6 question to be finished --</p> <p>7 THE DEPONENT: I will.</p> <p>8 MR. KWUN: -- before you start answering.</p> <p>9 THE DEPONENT: Thank you.</p> <p>10 MR. KWUN: If we could --</p> <p>11 MR. RAMSEY: It's not a real</p> <p>12 conversation.</p> <p>13 THE DEPONENT: Yes.</p> <p>14 MR. RAMSEY: It's about how we do these</p> <p>15 things.</p> <p>16 MR. KWUN: This is a perfect example of</p> <p>17 all three of us actually speaking over each other.</p> <p>18 THE DEPONENT: Yes.</p> <p>19 MR. KWUN: It's going to be very hard to</p> <p>20 get a clean record unless we all --</p> <p>21 THE DEPONENT: Yes.</p> <p>22 MR. KWUN: -- wait for one person to</p> <p>23 finish, so --</p> <p>24 THE DEPONENT: Yes.</p> <p>25 MR. KWUN: -- wait for one person -- wait</p> <p style="text-align: right;">Page 25</p>

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<p>1 that, but I don't have any concrete example and</p> <p>2 I -- I'm -- I'm aware that today they do not seem</p> <p>3 to be doing so.</p> <p>4 Q. (By Mr. Ramsey) Okay. And -- and is your</p> <p>5 awareness of Microsoft's control over its Windows APIs</p> <p>6 based on your participation in the software development</p> <p>7 community?</p> <p>8 A. Could you repeat the question.</p> <p>9 Q. Is your awareness of Microsoft's control</p> <p>10 over its Windows API based on your participation in</p> <p>11 the software development community?</p> <p>12 A. Yes.</p> <p>13 Q. Do you believe that others in the</p> <p>14 software development community are aware of</p> <p>15 Microsoft's control over its Windows APIs?</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: I would -- I would be</p> <p>18 guessing. So I would -- I would guess so.</p> <p>19 Q. (By Mr. Ramsey) Based on your many years of</p> <p>20 experience, do you believe that Microsoft's control</p> <p>21 over its Windows APIs is something that would be widely</p> <p>22 understood by software developers?</p> <p>23 MR. KWUN: Objection. Form.</p> <p>24 THE DEPONENT: Well, I think people would</p> <p>25 see Microsoft doing so as an attempt to -- to keep</p> <p style="text-align: right;">Page 30</p>	<p>1 A. Yes.</p> <p>2 Q. I believe Phoenix was another IBM cloning</p> <p>3 company?</p> <p>4 A. Yeah, I think they -- they did a -- their</p> <p>5 own BIOS, yes.</p> <p>6 Q. And -- and it's your understanding that</p> <p>7 those companies conducted black box -- box testing</p> <p>8 of the IBM BIOS in order to generate their own API</p> <p>9 documentation without having to look at any IBM</p> <p>10 materials, true?</p> <p>11 A. Yes.</p> <p>12 Q. And so in the context of BIOS, the</p> <p>13 companies that created a new -- a new form of BIOS,</p> <p>14 if you will, did so without referencing the API</p> <p>15 spec- -- specifications of IBM at all?</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: Yeah, it -- it's my</p> <p>18 understanding they did a clean room implementation,</p> <p>19 in which nobody who wrote the code had seen any of</p> <p>20 IBM's code, and they were creating their own</p> <p>21 implementation with -- just based on the API.</p> <p>22 Q. (By Mr. Ramsey) So what is your basis for</p> <p>23 knowing with certainty that the creators of Compaq and</p> <p>24 the Phoenix BIOS had access to the IBM API</p> <p>25 documentation?</p> <p style="text-align: right;">Page 32</p>
<p>1 their monopoly on -- on the desktop, but not</p> <p>2 necessarily the right thing legally or morally, or</p> <p>3 for the rest of the industry.</p> <p>4 Q. (By Mr. Ramsey) All right. So you agree</p> <p>5 with me, as a factual matter, while developers may not</p> <p>6 like it, they might be aware that Microsoft exerted</p> <p>7 control over its Windows APIs?</p> <p>8 A. Yes. They might be.</p> <p>9 MR. KWUN: Objection. Form.</p> <p>10 THE DEPONENT: Oh, sorry.</p> <p>11 Q. (By Mr. Ramsey) Are you aware of any other</p> <p>12 companies, other than Microsoft, that exert control</p> <p>13 over the copying and use of their APIs?</p> <p>14 A. Off the top of my head, none come to</p> <p>15 mind. I'm aware that IBM did not do so with BIOS</p> <p>16 and that AT&amp;T did not do so with UNIX. And I -- I</p> <p>17 think I gave some other examples in my report.</p> <p>18 Q. In your -- let's talk about the BIOS.</p> <p>19 So you agree with me that in the early</p> <p>20 days, there -- after IBM came out with its BIOS</p> <p>21 APIs, there were a number of PC clone companies,</p> <p>22 true?</p> <p>23 A. Yes.</p> <p>24 Q. For example, Compaq is such a company,</p> <p>25 true?</p> <p style="text-align: right;">Page 31</p>	<p>1 MR. KWUN: Objection. Form.</p> <p>2 THE DEPONENT: I can't say that from</p> <p>3 direct experience.</p> <p>4 Q. (By Mr. Ramsey) All right. So it's possible</p> <p>5 that Compaq and Phoenix, in creating their own BIOS,</p> <p>6 had access to the IBM APIs, but they may not have, too?</p> <p>7 MR. KWUN: Objection. Form.</p> <p>8 THE DEPONENT: Well, it's certainly</p> <p>9 possible they had access to the APIs, yes.</p> <p>10 Q. (By Mr. Ramsey) But you don't know one way</p> <p>11 or the other with certainty whether the IBM</p> <p>12 clone-makers had access to the IBM API or not?</p> <p>13 MR. KWUN: Objection. Form.</p> <p>14 THE DEPONENT: Are you asking if they had</p> <p>15 access to the API, which they independently</p> <p>16 deduced, or to the source code which belonged to</p> <p>17 IBM?</p> <p>18 Q. (By Mr. Ramsey) I'm saying -- I'm asking you</p> <p>19 whether the -- whether the makers of the IBM clone</p> <p>20 computers had access to -- direct access to the IBM</p> <p>21 APIs.</p> <p>22 MR. KWUN: Objection. Form.</p> <p>23 THE DEPONENT: As I understand it, the</p> <p>24 APIs were not well -- well-documented in such a</p> <p>25 form that somebody could just read the APIs and</p> <p style="text-align: right;">Page 33</p>



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<p>1 build an implementation. But they were 2 reverse-engineered; they figured out what the API 3 was -- 4 Q. (By Mr. Ramsey) Is it -- 5 A. -- but I'm not sure. 6 Q. -- your understanding that in the -- in 7 the context of BIOS, the purpose of the resulting 8 IBM clone computers was to be compatible with the 9 IBM BIOS? 10 A. That's my understanding, yes. 11 Q. So in the context of BIOS, an application 12 written for the IBM computer would run on the IBM 13 clone computers and vice versa? 14 A. Yes. 15 Q. Now, you understand that in the context 16 of Android, an application written for the Android 17 platform will not run on the Java platform, true? 18 MR. KWUN: Objection. Form. 19 THE DEPONENT: Not necessarily. It might 20 or might not run, depending on what subset of the 21 platform you use. 22 Q. (By Mr. Ramsey) You understand that the Java 23 platform and the Android platform have different 24 virtual machines? 25 A. Yes, that's my understanding.</p> <p style="text-align: right;">Page 34</p>	<p>1 A. No, I'm not aware of that. 2 Q. Okay. Likewise, you never heard of a 3 Java application compiled a byte code being run on 4 the Android platform, true? 5 MR. KWUN: Objection. Form. 6 THE DEPONENT: I -- I can't say with 7 certainty, no. 8 Q. (By Mr. Ramsey) But you've never heard of a 9 Java application being compiled and running on Android? 10 MR. KWUN: Objection. Form. 11 THE DEPONENT: Well, I guess I've heard 12 of people who have written code in Java, then 13 easily adapting them to run on Android, but I -- I 14 don't know if you can do that without changing a 15 line of code. 16 Q. (By Mr. Ramsey) But you never heard of a 17 situation where a Java application is compiled in a 18 format that can run on the Java virtual machine and 19 simply having that run in that form on Android? 20 A. Right. So you're asking me questions 21 about the Android platform byte code versus the 22 Java byte code for the Java virtual machine and 23 that is not my expertise. But as I understand it, 24 the byte codes are different. 25 Q. Okay. You've provided a number of</p> <p style="text-align: right;">Page 36</p>
<p>1 Q. And it's true that if a developer writes 2 a program in Android and compiles it and attempts 3 to run it on the Java platform, it won't run 4 because there's a different virtual machine there? 5 A. Yes. I'm talking about the source code 6 working on both platforms. 7 Q. All right. I'm just -- my question is -- 8 is about whether Android applications run on Java. 9 You agree with me that an Android 10 application, written in the context of Android, 11 compiled and then attempted to be run on the Java 12 platform, simply won't run? 13 MR. KWUN: Objection. Form. 14 THE DEPONENT: I don't know that for 15 certain, but I'm guessing that the -- the byte 16 codes generated won't be exactly compatible. 17 Q. (By Mr. Ramsey) All right. So you agree 18 that an Android application cannot be executed on the 19 Java platform? 20 MR. KWUN: Objection. Form. 21 THE DEPONENT: I don't know. I don't 22 think so. 23 Q. (By Mr. Ramsey) Okay. You never heard of an 24 Android application that's compiled to byte code being 25 run directly on the Java platform, true?</p> <p style="text-align: right;">Page 35</p>	<p>1 examples of APIs in your report; isn't that true? 2 A. Yes. 3 Q. So we've talked about BIOS. That's one 4 example of an API in your -- 5 A. Yes. 6 Q. -- in your report, right? 7 You talk about the -- the Linux APIs in 8 your report as an example, true? 9 A. Yes, I do. 10 Q. You talk about SQL APIs in your -- your 11 report, true? 12 A. Yes, I do. 13 Q. You talk about Wine as a set of APIs in 14 your -- in your report, true? 15 A. Yes. 16 MR. KWUN: Objection. Form. 17 Q. (By Mr. Ramsey) So if I refer to -- to the 18 other APIs, can we use that as a shorthand when I'm -- 19 for us -- for me to refer to all of the APIs that you 20 address in your report? 21 A. By the "other APIs," you mean all the 22 ones except for the -- the Java APIs in question? 23 Q. Correct. 24 A. Right. Okay. So, yeah, we can call 25 those all the other APIs.</p> <p style="text-align: right;">Page 37</p>



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<p>1 Would those includes ones that I haven't 2 mentioned in my report or only those ones? 3 Q. Only the ones in your report. 4 A. Okay. 5 Q. So you agree with me that all of the 6 other APIs beyond Java that are discussed in your 7 report do not contain the -- the method 8 declarations and the organization of the Java APIs 9 that are actually at issue? 10 MR. KWUN: Objection. Form. 11 THE DEPONENT: I'm not sure I understand 12 the question. The simple answer is, of course, 13 they don't. It's a different language. It's a 14 different -- it's a different -- they may -- they 15 may not even have method declarations, but they 16 have the equivalent of that in other languages. 17 Q. (By Mr. Ramsey) Okay. That would -- 18 actually was my question. 19 Just simply, the other examples of APIs 20 addressed in your report do not contain the 21 specific Java-based method declarations or 22 organization that are actually at issue in this 23 case? 24 MR. KWUN: Objection. Form. 25 THE DEPONENT: Yes, there are different</p> <p style="text-align: right;">Page 39</p>	<p>1 your report are about communication between programs? 2 MR. KWUN: Objection. Form. 3 THE DEPONENT: I don't know. I'd have to 4 look at that. 5 I don't know. It seems like there's some 6 of both. I mean, like, say -- take something like 7 a square root routine that -- that's an interface 8 between a program and -- and a library. It may be 9 a math library. It might or might not be part of a 10 platform. 11 BIOS is definitely a platform. SQL can 12 be between two programs and maybe not between a 13 program and a platform, or you might use SQL to 14 talk to multiple database systems from the same 15 program. 16 I guess I don't have a simple answer to 17 your question. 18 Q. (By Mr. Ramsey) Okay. If you could please 19 turn to paragraph 38 of your report. Let me know when 20 you're there. 21 A. Yes. 22 Q. In paragraph 38, you talk about two 23 methods, square root and max, true? 24 A. Yes. 25 Q. And it's true that in your expert report</p> <p style="text-align: right;">Page 40</p>
<p>1 APIs, so they would have different things in them. 2 Q. (By Mr. Ramsey) And for all the other APIs, 3 beyond Java that are discussed in your report, it's 4 possible that in -- in -- at least some of those 5 contexts, the idea and the purpose of those APIs is to 6 create compatibility between two different platforms. 7 One -- in other words, a programmer data 8 in one platform will naturally easily run on the 9 other platform? 10 MR. KWUN: Objection. Form. 11 THE DEPONENT: That is one possible 12 purpose of an API. The more -- the -- I would say 13 the -- the main reason for an API is to find a way 14 for two pieces of software to talk to one another, 15 regardless of platform and -- I mean, it doesn't 16 even have to be a platform API. It could just be 17 an interface between two components. 18 I spent -- I spent many years working in 19 the object management group defining APIs that were 20 interfaces between pieces that were implemented by 21 different companies. So the API there was not so 22 much about platform but about communication between 23 programs. 24 Q. (By Mr. Ramsey) All right. In general, do 25 you believe that the other APIs that you address in</p> <p style="text-align: right;">Page 39</p>	<p>1 square root and max are the only two examples of 2 Java method declarations that you specifically 3 address? 4 MR. KWUN: Objection. Form. 5 THE DEPONENT: I'm not certain those are 6 the only two, but those seem like simple examples 7 that I could explain to a layman. 8 Q. (By Mr. Ramsey) So you chose simple examples 9 of square root and math in -- max in your report simply 10 because they are easy to explain? 11 A. Yes. 12 MR. KWUN: Objection. Form. 13 Q. (By Mr. Ramsey) Could you please flip 14 through your report for a minute. I -- I'd just like 15 you to confirm that beyond the square root and max 16 method names, you don't specifically mention any other 17 Java method declaration in your report. 18 A. Well, okay, I'll take a look through 19 this. 20 Yes, at first glance, those are the only 21 Java examples I have. Most of them are other 22 programming languages. 23 Q. And you understand that there are 24 thousands of method declarations at issue in this 25 lawsuit?</p> <p style="text-align: right;">Page 41</p>

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<p>1 A. Yes.</p> <p>2 Q. And you've addressed two method names,</p> <p>3 true?</p> <p>4 A. Yes. I'm giving examples.</p> <p>5 Q. Okay. But you've done no statistical</p> <p>6 analysis of, for example, the length of method</p> <p>7 names, even within the Java platform, true?</p> <p>8 A. The length of method names? You mean how</p> <p>9 many characters there is in the name?</p> <p>10 Q. Correct.</p> <p>11 A. No.</p> <p>12 Q. And you've done no statistical analysis</p> <p>13 of the length of method declarations at issue in</p> <p>14 this case, true?</p> <p>15 A. No, no statistical analysis.</p> <p>16 Q. Okay. And you've not looked or listed</p> <p>17 anywhere in your report the full lists of thousands</p> <p>18 of method declarations that are at issue in this</p> <p>19 case, true?</p> <p>20 A. No, I have not. I'm -- I am familiar</p> <p>21 with the -- the Java APIs. And as I understand,</p> <p>22 there's 37 of those APIs at issue, and I have in my</p> <p>23 head a rough idea of how big those APIs are.</p> <p>24 Q. Okay. But my -- my question is, you've</p> <p>25 done no specific analysis beyond looking at the</p> <p style="text-align: right;">Page 42</p>	<p>1 A. The word "organization" is -- is not</p> <p>2 well-defined in this context, I believe, so --</p> <p>3 define organization.</p> <p>4 Q. All right. I note in your report that</p> <p>5 you do not discuss the decisions about which</p> <p>6 methods to group in which classes, which classes to</p> <p>7 group within which packages in Java, for example.</p> <p>8 A. Yes, that's true.</p> <p>9 Q. So you have no -- express no opinions in</p> <p>10 your report regarding the -- the organization? And</p> <p>11 by that I mean, grouping of methods, classes and</p> <p>12 packages.</p> <p>13 MR. KWUN: Objection. Form.</p> <p>14 THE DEPONENT: I think I might have said</p> <p>15 something about the grouping. I can't remember.</p> <p>16 There -- that -- if -- you know, if this -- if this</p> <p>17 method happened to be in a different package versus</p> <p>18 this package, that would be a -- you know, that</p> <p>19 would be just like another variation on a different</p> <p>20 name for the method. It's just a different</p> <p>21 interface for the same thing.</p> <p>22 Q. (By Mr. Ramsey) Well, I -- I didn't see</p> <p>23 anything in your report that talked about decisions to</p> <p>24 group methods, classes and packages within Java.</p> <p>25 A. Uh-huh. All right.</p> <p style="text-align: right;">Page 44</p>
<p>1 names of square -- square root and max of any other</p> <p>2 aspect of the method declarations at issue?</p> <p>3 MR. KWUN: Objection. Form.</p> <p>4 THE DEPONENT: I'm not sure I understand</p> <p>5 the question because -- I mean, I've looked at some</p> <p>6 of the other APIs at issue. So are you saying I</p> <p>7 haven't thought about those or are you saying I</p> <p>8 haven't -- I haven't listed those or specifically</p> <p>9 used them as an example?</p> <p>10 Q. (By Mr. Ramsey) I'm saying, you've not</p> <p>11 specifically listed or addressed in your report -- in</p> <p>12 your expert report, any Java method declarations beyond</p> <p>13 the names square root and max?</p> <p>14 A. That's right. I was trying to keep it</p> <p>15 simple.</p> <p>16 Q. Okay. It's possible that there's much</p> <p>17 longer and complex method names and method</p> <p>18 declarations in the Java API, correct?</p> <p>19 A. It's possible.</p> <p>20 Q. And by much longer and more complex, I</p> <p>21 mean more longer -- longer and more complex than</p> <p>22 the name square root and max.</p> <p>23 A. Yes.</p> <p>24 Q. I note that nowhere in your report do you</p> <p>25 address the organization of the Java API, true?</p> <p style="text-align: right;">Page 43</p>	<p>1 MR. KWUN: Object. There's no question</p> <p>2 pending.</p> <p>3 Q. (By Mr. Ramsey) If you could show me where</p> <p>4 you -- you mention such an issue, please take a moment</p> <p>5 to do that.</p> <p>6 A. Okay. I may be thinking of the amicus</p> <p>7 brief, but -- let me look through here.</p> <p>8 Q. Sure.</p> <p>9 A. Well, on item 41, I give the example</p> <p>10 if -- if I don't know -- there's different options</p> <p>11 and different ways of calling the square root</p> <p>12 functionality. And I might have to look up the</p> <p>13 right API for this context.</p> <p>14 That's kind of an example of where I</p> <p>15 don't know where the square root routinely is. It</p> <p>16 might be in a different class or in a different</p> <p>17 package. But that's not exactly the example I was</p> <p>18 thinking of when I said that.</p> <p>19 Q. Okay.</p> <p>20 A. I would say that moving a method to a</p> <p>21 different class or reorganizing the API a little</p> <p>22 would be another example of like just a different</p> <p>23 spelling. It's not fundamental, but it's a -- it's</p> <p>24 a -- it's a change to the API that is maybe</p> <p>25 spurious to me, as a programmer, to have it moving</p> <p style="text-align: right;">Page 45</p>

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<p>1 that Sun, now Oracle, will have some modicum of 2 control over the Java platform? 3 MR. KWUN: Objection. Form. 4 THE DEPONENT: I don't know if it's so 5 much about control is their ability to -- to 6 publish and disseminate the code and so on. So I 7 don't think the community process is for Sun or 8 Oracle to have control, so much as for them to be 9 able to -- to bring together all of these ideas 10 from different sources. 11 Q. (By Mr. Ramsey) You agree that from time to 12 time, through the Java Community Process, new Java APIs 13 are created, true? 14 A. Yes. 15 Q. And the creators of these new APIs 16 contribute their right in the API to Sun, now 17 Oracle, true? 18 MR. KWUN: Ob- -- objection. Form. 19 THE DEPONENT: Yes, that's my 20 understanding. 21 Q. (By Mr. Ramsey) Have you heard of a concept 22 called write once/run anywhere with respect to Java? 23 A. Yes, I have. 24 Q. What is your understanding of write 25 once/run anywhere?</p> <p style="text-align: right;">Page 54</p>	<p>1 THE DEPONENT: Well, I don't know if I 2 can speculate on why Sun did that, whether the 3 executive level made that decision or why. But I 4 can understand that would be very attractive to 5 people because -- especially with the advent of the 6 Internet, it was very hard to write code that would 7 run in all the different browsers and on all the 8 different platforms. 9 Q. (By Mr. Ramsey) And let's be clear. By 10 write once/run anywhere, in the context of Java, we 11 mean an application written in Ja- -- a particular Java 12 platform specification, for example, Java SE -- 13 A. Yes. 14 Q. -- in one context will run on that same 15 platform specification in another context? 16 MR. KWUN: Objection. Form. 17 THE DEPONENT: Yes, that's my 18 understanding. 19 Q. (By Mr. Ramsey) And the idea is under -- 20 under Java SE, is that if you write an application in 21 one place in Java SE, it should be able to run every 22 place where Java SE is running? 23 A. Yes, that's my understanding. 24 Q. And it's true that one of the ways Sun 25 made sure that Java applications could be written</p> <p style="text-align: right;">Page 56</p>
<p>1 A. The idea is if you write a Java program, 2 it should run on any Java implementation. But it 3 pretty much -- Sun gave it up when they started 4 defining multiple Java platforms like the ME 5 platform and the EE platform. 6 Q. Well, you agree that the write once/run 7 anywhere principle holds within the context of 8 Java SE, in particular, for example? 9 A. Yeah, within -- 10 MR. KWUN: Objection. Form. 11 THE DEPONENT: Oh, sorry. 12 Yes, within a platform -- well, even in 13 the case of SE, there's some variations. But, yes, 14 that's the idea. 15 Q. (By Mr. Ramsey) Okay. So isn't it true the 16 write once/run anywhere idea holds within the context 17 of a given platform definition by Sun or Oracle? 18 MR. KWUN: Objection. Form. 19 THE DEPONENT: Well, I can't say it holds 20 in all cases, but that's the idea, yes. 21 Q. (By Mr. Ramsey) Why did Sun put forward this 22 idea of having a write once/run anywhere prin- -- 23 principle carried out through a particular Java 24 platform? 25 MR. KWUN: Objection. Form.</p> <p style="text-align: right;">Page 55</p>	<p>1 once and run anywhere Java exists is by controlling 2 how people use the APIs? 3 MR. KWUN: Objection. Form. 4 THE DEPONENT: Well, they control the -- 5 the definitions of the APIs, and then other people 6 would choose to conform or not, if they want it to 7 run everywhere. 8 Q. (By Mr. Ramsey) Are you familiar with a Sun, 9 and now Oracle, agreement called the specification 10 license? 11 A. Roughly, no. I -- my experience would be 12 10 or 15 years old on -- on that. 13 Q. Okay. What do you know about the Sun, 14 now Oracle, specification license as it relates to 15 Java? 16 A. What I knew when I was working on the 17 Java Community Process, that when somebody signed 18 up to participate, then they signed an agreement 19 for the community process participation. And I 20 don't know what they're calling their latest 21 specification license. 22 Q. Okay. I'll represent to you that the 23 specification license is a license that applies to 24 the API documentation for Java. 25 A. Okay.</p> <p style="text-align: right;">Page 57</p>

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<p>1 MR. KWUN: Objection.</p> <p>2 That's fine, just -- but you should wait</p> <p>3 until there's a question before you respond.</p> <p>4 THE DEPONENT: Oh, okay.</p> <p>5 Q. (By Mr. Ramsey) And I'll also represent that</p> <p>6 that agreement controls whether a part- -- party using</p> <p>7 the APIs can superset or subset those APIs.</p> <p>8 Do you accept the repre- -- that</p> <p>9 representation?</p> <p>10 MR. KWUN: Objection. Form.</p> <p>11 THE DEPONENT: I -- I -- I can't -- I</p> <p>12 can't comment on the specification license.</p> <p>13 Q. (By Mr. Ramsey) Well, let me ask you this:</p> <p>14 Are you familiar of -- with restrictions by Sun on</p> <p>15 supersetting or subsetting of the Java APIs?</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: No, I'm not familiar on</p> <p>18 their current position of Oracle on that.</p> <p>19 Q. (By Mr. Ramsey) I'm talking about his- --</p> <p>20 historically, even before Oracle.</p> <p>21 Do you understand that Sun limited the</p> <p>22 ability of users of the Java API to superset or</p> <p>23 subset them -- them?</p> <p>24 And by that I mean, use only a portion or</p> <p>25 to extend them in certain ways.</p> <p style="text-align: right;">Page 58</p>	<p>1 THE DEPONENT: Well, I would say it's not</p> <p>2 just about versions of the Java platform. It's</p> <p>3 about the programs written to those platforms.</p> <p>4 But, yeah, you want all the application to run on</p> <p>5 all the platforms, yes.</p> <p>6 Q. (By Mr. Ramsey) Okay. Did you ever hear</p> <p>7 developers talk about Sun's limitations on supersetting</p> <p>8 or subsetting the Java APIs?</p> <p>9 A. Yeah, I heard complaints that Sun was</p> <p>10 overly heavy-handed about that, choosing that --</p> <p>11 that compatibility constraint over other -- other</p> <p>12 innovations that might allow progress where, for</p> <p>13 example, there might be a slightly bigger platform</p> <p>14 in a slightly smaller platform.</p> <p>15 In fact, in the original Java, there was</p> <p>16 only the SE platform, and then the problem arose</p> <p>17 that some people wanted more of a Java EE or a</p> <p>18 Java ME, or whatever.</p> <p>19 So, yeah, I feel Sun was slow to adapt to</p> <p>20 the needs of different subsets of the Java</p> <p>21 community. And that, for example, Microsoft</p> <p>22 forking off their own language, C#, because Sun</p> <p>23 refused to let them superset, was unfortunate</p> <p>24 because it could have created a much bigger Java</p> <p>25 community. But instead they -- they went and did</p> <p style="text-align: right;">Page 60</p>
<p>1 A. Yes.</p> <p>2 MR. KWUN: Objection. Form.</p> <p>3 THE DEPONENT: Sorry.</p> <p>4 Yes, I was -- it was my understanding,</p> <p>5 you know, a decade or two ago, that that was</p> <p>6 something that Sun was attempting to accomplish</p> <p>7 with licensing agreements.</p> <p>8 Q. (By Mr. Ramsey) Okay. Do you know why Sun</p> <p>9 placed limits on the ability to superset or subset the</p> <p>10 Java APIs?</p> <p>11 A. I would be speculating on why. I can</p> <p>12 tell you why I would do that if I were Sun.</p> <p>13 Q. Well, I'd like your understanding of why</p> <p>14 you believe Sun placed limitations on the ability</p> <p>15 to superset or subset the Java APIs.</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: It is my understanding</p> <p>18 that Sun wanted to avoid incompatible versions of</p> <p>19 the platform so that they'd have the right ones run</p> <p>20 anywhere.</p> <p>21 Q. (By Mr. Ramsey) And Sun's limitations on</p> <p>22 supersetting or subsetting the Java APIs was to ensure</p> <p>23 that Java -- that versions of the Java platform were</p> <p>24 compatible?</p> <p>25 MR. KWUN: Objection. Form.</p> <p style="text-align: right;">Page 59</p>	<p>1 another -- incompatible things.</p> <p>2 Perhaps it would have been possible to</p> <p>3 negotiate with Microsoft to add the features they</p> <p>4 wanted as -- as an extra platform.</p> <p>5 Q. So is it your understanding that</p> <p>6 developers were aware of Sun's limitations on</p> <p>7 supersetting and subsetting the Java APIs? They</p> <p>8 may not have liked it, but they knew about it?</p> <p>9 MR. KWUN: Objection. Form.</p> <p>10 THE DEPONENT: I'd have to guess. I'd</p> <p>11 say maybe -- you know, maybe half the developers</p> <p>12 were aware of that -- I don't know -- what</p> <p>13 subset -- some of them were, yes.</p> <p>14 Q. (By Mr. Ramsey) Okay. Not a trivial number</p> <p>15 of developers in the Java community were aware of the</p> <p>16 superset and subset limitations imposed by Sun on the</p> <p>17 Java APIs?</p> <p>18 MR. KWUN: Objection. Form.</p> <p>19 THE DEPONENT: Well, as you said, I</p> <p>20 haven't done a statistical study of the -- of</p> <p>21 the -- or survey. So I can't say what percentage</p> <p>22 were aware. But, yes, some were aware.</p> <p>23 Q. (By Mr. Ramsey) Okay. And -- and there was</p> <p>24 a very public dispute between Microsoft and Sun</p> <p>25 regarding Microsoft's unauthorized copying of the</p> <p style="text-align: right;">Page 61</p>

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<p>1 A. Eventually. I believe IBM introduced SQL 2 in the '70s and it became a SQL standard like a 3 decade later. And Oracle introduced their product 4 around 1980. 5 Q. So about what year did the SQL APIs 6 become a formal documented standard? 7 A. I would guess 1987, plus or minus. 8 Q. So is it true that for 10 years before 9 SQL became a documented formal standard that IBM 10 exerted some control over the SQL APIs? 11 A. I'm not aware if they did or did not. 12 Q. Okay. It's possible that IBM -- 13 A. It's possible. 14 MR. KWUN: Objection. Form. 15 THE DEPONENT: Yeah. 16 Q. (By Mr. Ramsey) And you understand that 17 SQL became a formal standard through the ANSI, 18 American National Standards Institute, and ISO, 19 International Organization for Standardization, in 20 the mid-1980s? 21 A. Somewhere around then, yes. 22 Q. And you agree with me that the Java 23 platform and the Java APIs are not a formal 24 standard under ANSI or ISO, or any other formal 25 standard-setting process?</p> <p style="text-align: right;">Page 82</p>	<p>1 A. Yes. 2 Q. Isn't -- isn't it true that ODMG was a 3 group of companies that came together who agreed 4 that they would share and make open their APIs 5 between them? 6 A. Yes, they -- they agreed that what they 7 contributed would be shared and open. 8 Q. So your experience with the ODMG APIs -- 9 was it SQL APIs involved or something else? 10 A. No, it wasn't SQL. It was an object -- 11 it -- we had a thing called OQL. It was kind of 12 like SQL for objects. 13 Q. So you agree that the ODMG process that 14 you were involved in was a group of companies that 15 came together and expressly agreed, hey, we're 16 going to share and make open our APIs? 17 A. Yes. 18 Q. Do you agree with me that in not every 19 context of APIs, in -- in other areas, that there 20 is such a process of companies coming to -- 21 together to agree to make their APIs open? 22 MR. KWUN: Objection. Form. 23 THE DEPONENT: Are you -- I'm not sure 24 what the scope of the question is. 25 You say in any area of computer science</p> <p style="text-align: right;">Page 84</p>
<p>1 A. Well, it depends what you consider a 2 formal standards process, but -- and I'm not aware 3 of all the possible standards there might be around 4 Java. Maybe -- maybe ANSI or ISO have a committee 5 working on that. But not that I'm aware of, no. 6 Q. Okay. So you're not aware of ANSI or 7 ISO, or comparable formal standards bodies, 8 defining a Java standard? 9 A. No, I'm not. I'm only aware of the 10 Java Community Process. 11 Q. And the Java Community Process is 12 separate, a different process than the standards 13 bodies, such as ANSI, ISO, and other standards 14 bodies? 15 MR. KWUN: Objection. Form. 16 Q. (By Mr. Ramsey) They're not -- they're not 17 related? 18 MR. KWUN: Objection. Form. 19 THE DEPONENT: Well, I guess -- yeah, 20 they're not related directly. 21 Q. (By Mr. Ramsey) But isn't it true that you 22 were involved in something called object data 23 management group? 24 A. Yes. 25 Q. ODMG for -- as an abbreviation.</p> <p style="text-align: right;">Page 83</p>	<p>1 there was no other -- 2 Q. (By Mr. Ramsey) Let me put it this way. It 3 is true that not -- with respect to -- not with respect 4 to all APIs, is there a process by which companies come 5 together and say, hey, we're going to make our APIs 6 open and share freely with each other? 7 A. Yes, sometimes they do. Sometimes they 8 don't. 9 Q. What happens when companies don't come 10 together and expressly agree -- 11 MR. KWUN: Objection. 12 Q. (By Mr. Ramsey) -- we're going to -- we're 13 going to share APIs? 14 MR. KWUN: Objection. Form. 15 THE DEPONENT: In my opinion, that 16 creates a very messy situation that's not very 17 productive for everyone. It reminds me of all the 18 different standard -- you know, SD cards and the 19 Sony cards, all these different flashcard standards 20 that were very confusing. You didn't know which 21 cards you could use with what and -- and in other 22 arenas where there's multiple standards in 23 software. 24 Q. (By Mr. Ramsey) So is it true that in -- in 25 the software industry, in general, sometimes companies</p> <p style="text-align: right;">Page 85</p>



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<p>1 Q. Okay. What was your view of Sun at the 2 time that you were laid off in 2007?</p> <p>3 MR. KWUN: Objection. Form.</p> <p>4 THE DEPONENT: I was discouraged that Sun 5 was not funding any of the projects that I felt 6 would be innovative enough to pull it out of the -- 7 the tailspin it appeared to be in.</p> <p>8 Q. (By Mr. Ramsey) So in 2007, you were not 9 happy with Sun's business strategies as they relate to 10 you?</p> <p>11 MR. KWUN: Objection. Form.</p> <p>12 THE DEPONENT: Well, I actually was 13 relatively happy with Jonathan Schwartz as a CEO, 14 but somehow in the execution Sun was falling into 15 some -- some -- some traps.</p> <p>16 Q. (By Mr. Ramsey) Okay. Were you involved 17 with Sun's efforts around Java in the mobile industry?</p> <p>18 A. A little bit. A little bit. I was 19 advising someone who was working on that.</p> <p>20 MR. KWUN: Dr. Cattell, you should try to 21 make sure you wait until Mr. Ramsey has finished 22 with his questions.</p> <p>23 THE DEPONENT: I'm sorry.</p> <p>24 Q. (By Mr. Ramsey) What was your involvement 25 in -- in Sun's efforts around Java and mobile?</p> <p style="text-align: right;">Page 90</p>	<p>1 of -- the -- the main interest area.</p> <p>2 Q. (By Mr. Ramsey) You've never written a -- an 3 API specifically for a -- a mobile device, correct?</p> <p>4 MR. KWUN: Objection. Form.</p> <p>5 THE DEPONENT: That's correct. I've only 6 participated.</p> <p>7 Q. (By Mr. Ramsey) What did you do to prepare 8 for your deposition today?</p> <p>9 MR. KWUN: Objection. I'm just going to 10 caution the witness, you can talk about who you met 11 with, how long you met with them --</p> <p>12 THE DEPONENT: Yeah.</p> <p>13 MR. KWUN: -- but you shouldn't discuss 14 any of the substance of your communications with 15 me.</p> <p>16 THE DEPONENT: Yes. So my -- my 17 preparation for this meeting has mostly consisted 18 of research on the Internet to look at other 19 examples, to look at the background of the case, 20 and so on.</p> <p>21 Since I wasn't supposed to talk to anyone 22 about the case, I wasn't able to do any surveys, or 23 anything else, as you were discussing, yes.</p> <p>24 Q. (By Mr. Ramsey) Okay. You're not an 25 economist, correct?</p> <p style="text-align: right;">Page 92</p>
<p>1 A. I worked with a more junior engineer, 2 whose name I don't recall at the time, but he was 3 one of the leaders on an attempt to capture some of 4 the ME space.</p> <p>5 And he was having a bit of an uphill 6 battle getting the -- the companies to sign up for 7 it. And I gave him some suggestions and we talked 8 about what should not belong in the API and what 9 should. So yeah...</p> <p>10 Q. And who was the gentleman that you talked 11 with?</p> <p>12 A. I can't remember that off the top of my 13 head, but I could find out.</p> <p>14 Q. Okay. You understand that Java ME was in 15 a great number of mobile phones, true?</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: I -- I don't know how many 18 mobile phones it ended up in.</p> <p>19 Q. (By Mr. Ramsey) All right. Was your role 20 at -- at Sun regarding Java primarily with respect to 21 databases and servers, not mobile?</p> <p>22 MR. KWUN: Objection. Form.</p> <p>23 THE DEPONENT: That was my main focus. 24 But a distinguished engineer at Sun is expected to 25 have broader impact than -- than narrow interest</p> <p style="text-align: right;">Page 91</p>	<p>1 You're not an economist?</p> <p>2 A. I am only an economist -- well, yes, I'm 3 not an economist, right.</p> <p>4 Q. You don't --</p> <p>5 A. But I've had a lot of experience in 6 40 years in computer science seeing what has 7 economically worked and failed for software 8 companies and APIs.</p> <p>9 Q. All right. But you're not being put 10 forward as an -- an economist expert in this case?</p> <p>11 A. Yes.</p> <p>12 Q. And you don't have a Ph.D. in economics, 13 true?</p> <p>14 A. Correct.</p> <p>15 Q. You've never worked as an economist, 16 true?</p> <p>17 A. True.</p> <p>18 Q. You don't have a background in market 19 analysis; isn't that true?</p> <p>20 MR. KWUN: Objection. Form.</p> <p>21 THE DEPONENT: I would say I have a 22 background in market analysis because it's 23 something that has always interested me, to see 24 what succeeds and -- in fact, I'm working on a book 25 on things I wish I'd learned in engineering school</p> <p style="text-align: right;">Page 93</p>

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<p>1 about what will succeed and fail. And most of the 2 things don't have to do with good engineering; they 3 have to do with a lot of other things, like 4 management and marketing. 5 Q. (By Mr. Ramsey) But you don't have any -- 6 you don't have a Ph.D., for example, in analyzing 7 market impacts of particular business decisions? 8 A. No. That's not my academic background, 9 anyway. 10 Q. Okay. And you've spent your career as an 11 engineer; isn't that true? 12 A. I -- a very senior engineer who tends to 13 do more market analysis than coding. 14 Q. Okay. You've never conducted any formal 15 study regarding the market for Java SE or Java ME; 16 isn't that true? 17 MR. KWUN: Objection. Form. 18 THE DEPONENT: I need you to define 19 "formal" because I have -- I conducted interviews 20 of -- of people who like would come to the Sun 21 booth and -- and ask them about their applications 22 on so-and-so. I have done -- done informal 23 surveys, I guess I would say. 24 Q. (By Mr. Ramsey) Okay. In your expert 25 report, you provide no formal survey of the market for</p> <p style="text-align: right;">Page 94</p>	<p>1 actually apply that knowledge in your -- in your 2 opinions in this case? 3 MR. KWUN: Objection. Form. 4 THE DEPONENT: Only informally. 5 Q. (By Mr. Ramsey) So informally, how -- how 6 many -- how many software engineers did you interview 7 in your sample size? 8 MR. KWUN: Objection. Form. 9 THE DEPONENT: Well, thousands. If -- if 10 you mean over the -- over the decades, software 11 engineers I've talked to about issues related to 12 this, but I don't have -- but I don't have any hard 13 records of that. 14 Q. (By Mr. Ramsey) Okay. So it's your 15 assertion that you've talked to thousands of engineers, 16 over the course of your career, about issues related to 17 this case, but you have no -- no way to demonstrate 18 that? 19 A. Correct. 20 MR. KWUN: Objection. Form. 21 THE DEPONENT: Sorry. 22 MR. RAMSEY: If you could please mark the 23 next exhibit. 24 (Exhibit 5169 was marked for identification by 25 the court reporter and is attached hereto.)</p> <p style="text-align: right;">Page 96</p>
<p>1 Java SE or Java ME, true? 2 A. True. 3 Q. Isn't it true that you do not have a 4 degree in statistics? 5 A. No. I've taken a lot of statistics and 6 mathematics courses. 7 Q. You never worked, in your career, as a 8 statistician; that's never been your job, true? 9 A. Well, I -- I wrote some programs to do 10 statistical analyses at one time. But, no, I'm 11 not -- I wasn't known as a statistician. 12 Q. You've not been hired in this -- this 13 case as a statistics expert; is that -- 14 A. Correct. 15 Sorry. 16 Q. And you're not claiming to be a 17 statistics expert, are you? 18 MR. KWUN: Objection. Form. 19 THE DEPONENT: I don't know what that 20 means. I'm -- I -- I guess I could say I'm more -- 21 know more about statistics than most people. So 22 does that make me an expert? 23 Q. (By Mr. Ramsey) Okay. Let's assume that you 24 know more about statistics than -- than most people. 25 Notwithstanding that fact, you didn't</p> <p style="text-align: right;">Page 95</p>	<p>1 Q. (By Mr. Ramsey) All right. You've been 2 handed a document marked Exhibit 5169. 3 A. Yes. 4 Q. Do you recognize this document? 5 A. I do, yes. 6 Q. What is this document? 7 A. This is a book that I published with some 8 other Sun employees describing the JDBC API. 9 Q. And am I correct that the JDBC API is a 10 Sun database API that you created? 11 A. Yes. 12 Q. And isn't it true that the exhibit that 13 you've hand- -- you're looking at now, entitled 14 "JDBC API Tutorial and Reference," second edition, 15 is the specification for your -- your JDBC API? 16 MR. KWUN: Objection. Form. 17 THE DEPONENT: I -- I would say yes. 18 Q. (By Mr. Ramsey) Okay. If you could please 19 turn to the -- the fifth page into the document. It 20 has a copyright notice at the top of the page. 21 A. Okay. 22 Q. So on the fifth page of your JDBC API 23 specification, you agree with me that there is a 24 license under which Sun grants rights to this 25 material; isn't that true?</p> <p style="text-align: right;">Page 97</p>



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<p>1 Q. Okay. I'm going to read for you 2 section 1.5 from the ACM code of conduct, which is 3 entitled "Honor property rights including 4 copyrights and patent." 5 A. Yes. 6 Q. I quote the ACM code of conduct now. 7 "Violation of copyrights, patents, trade 8 secrets and the terms of license agreements is 9 prohibited by law in most circumstances. Even when 10 software is not so protected, such violations are 11 contrary to professional behavior." 12 Do you agree with that statement of the 13 ACM? 14 MR. KWUN: Objection. Form. 15 THE DEPONENT: I agree with that 16 statement when correctly interpreted, yes. 17 Q. (By Mr. Ramsey) Okay. 18 A. I -- they -- the -- the issue in question 19 here has to do with fair use of copyright and 20 exactly what should be copyrightable. 21 I will note that many ACM fellows and 22 other distinguished ACM members probably, you know, 23 in the top 1 percent, cosigned the amicus brief 24 with me arguing that this was a misapplication of 25 copyright.</p> <p style="text-align: right;">Page 114</p>	<p>1 declarations should be protected by copyright and 2 the copying of them is not fair use. 3 That's some -- that's one portion of the 4 community? 5 MR. KWUN: Objection. Form. 6 THE DEPONENT: Yes. I imagine there's 7 some portion. I'm not sure how big it is. And I 8 imagine it's heavy loaded towards companies that 9 want to protect their APIs. 10 Q. (By Mr. Ramsey) Right. So there are 11 companies who want to protect their APIs -- 12 A. Yes. 13 Q. -- in existence today? 14 A. Yes. Protecting their APIs is a 15 two-edged sword because it means there's less 16 corporation with -- in the industry and, 17 ultimately, less progress, I believe. 18 Q. All right. So companies have to make the 19 decision, is it better for us to attempt to prevent 20 copying of our API declarations, for example, or 21 are we going to put them out there for others to 22 use. 23 That's a business decision that companies 24 make from time to time? 25 A. Yes.</p> <p style="text-align: right;">Page 116</p>
<p>1 Q. Do -- do you think that it's true that 2 this -- this -- the present lawsuit, Oracle versus 3 Google, gendered some strong opinions in the 4 software development community? 5 A. I imagine it did, yes. We certainly got 6 75 of us, or 77 of us, to strongly object to -- to 7 the -- their -- or Supreme Court refusing to hear 8 this case. 9 Q. Do you agree, though, that there are 10 arguments on both sides. There are many voices in 11 the debate about whether the APIs in this case are 12 protected or not? 13 A. Yes. There are many voices, depending on 14 whether you -- I mean, my -- I'm interested in this 15 case because, as a computer scientist, I'd like to 16 see progress in computer science instead of the 17 kind of trouble we get with patent trolls and all 18 the intellectual property mess we get into. 19 Q. You agree that in the current debate 20 regarding whether fair use should apply to the 21 37 APIs at issue in this case, there are a spectrum 22 of different positions articulated publicly? 23 A. Yes. 24 Q. And there are some people involved in the 25 debate in the software community that say, yes, API</p> <p style="text-align: right;">Page 115</p>	<p>1 MR. KWUN: Objection. Form. 2 THE DEPONENT: They could do that, yes. 3 Q. (By Mr. Ramsey) And some companies may 4 decide it's better to attempt to prevent copying for -- 5 of our APIs and some companies may choose the opposite? 6 MR. KWUN: Objection. Form. 7 THE DEPONENT: They might. There might 8 be some legal issues here, too, with monopolistic 9 practices, especially if it's a very important API. 10 Q. (By Mr. Ramsey) You're aware that 11 historically some companies have decided it's better to 12 attempt to prevent copying of their APIs and other 13 companies who chose the opposite? 14 MR. KWUN: Objection. Form. 15 THE DEPONENT: Well, we have at least one 16 example of -- of a company who, at least at one 17 time, tried to keep people from using -- 18 re-implementing their APIs, yes. 19 Q. (By Mr. Ramsey) Okay. 20 A. And -- 21 Q. Do you -- do you believe today that 22 companies continue to -- in some instances, attempt 23 to prevent copying of their APIs, beyond Oracle, 24 and other companies choose the opposite? 25 MR. KWUN: Objection. Form.</p> <p style="text-align: right;">Page 117</p>

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<p>1 THE DEPONENT: Generally, I would say 2 not. It seems to me a vast majority of companies 3 allow someone else to implement their API. 4 Q. (By Mr. Ramsey) When -- the companies that 5 allow others to implement their APIs, do they sometimes 6 request royalties for that right? 7 MR. KWUN: Objection. Form. 8 THE DEPONENT: I'm not aware of that, no. 9 Q. (By Mr. Ramsey) You agree that that would 10 not be an irrational thing for a company to do, to 11 demand royalties if another is re-implementing that 12 company's APIs? 13 MR. KWUN: Objection. Form. 14 THE DEPONENT: I think it's actually 15 irrational in the sense that they shouldn't be able 16 to demand money for someone re-implementing the 17 same API. 18 Q. (By Mr. Ramsey) So you -- you -- it is your 19 belief that if a company has invested in creating APIs, 20 they should not be able to charge any royalty for that, 21 for their use of re-implementation? 22 A. As -- as a general rule. But I -- I 23 don't see the API, itself, as being a great 24 investment compared with the implementation, which 25 is maybe 10 times bigger or -- or more, while the</p> <p style="text-align: right;">Page 118</p>	<p>1 somebody put the steering wheel on the left side of 2 a car and the gear shift in the center, with four 3 on the floor, and then they claimed a copyright on 4 that layout so no other car company could do that, 5 then that's more like a method of operation that -- 6 that hurts the public, that things don't 7 interoperate and they're not compatible. 8 You should always try to use the API that 9 somebody has already defined. It's good computer 10 science and it's good industry practice, and it's 11 bad for everybody if you don't do that. 12 Q. (By Mr. Ramsey) So in your report, did you 13 actually do any analysis of whether the other APIs -- 14 and by that I mean, for example, Wine, SQL, Linux and 15 the other examples -- have been found to be protected 16 by copyright or not? 17 A. The -- if you look at the -- at what 18 people in the industry think, in general, it seems 19 to be that the expectation is that you should be 20 able to reuse an API. And, in fact, that that's 21 good practice. 22 Q. My question was a little different. 23 You didn't do any research, in carrying 24 out your investigation, whether there had been a 25 judicial finding, one way or the other, of whether</p> <p style="text-align: right;">Page 120</p>
<p>1 API is more like a method of operation that should 2 be protected by a patent but not a copyright. 3 Q. So you -- do you believe that it's 4 irrational, if a company has invested a great 5 amount of resources in designing an elaborate API, 6 that they would attempt to charge a royalty for the 7 re-implementation of that API -- API that required 8 the investment? 9 MR. KWUN: Objection. Form. 10 THE DEPONENT: I -- I don't know how to 11 answer that question. I think I already answered. 12 I think that -- that it's a bad thing to 13 demand money for someone to implement the same 14 method of operation that somebody else used. 15 Q. (By Mr. Ramsey) The question is, do you 16 think that it is -- it is rational for a company to 17 request a royalty for implementation of the -- their 18 API, if they've invested an enormous -- enormous amount 19 of resources into actually designing the API? 20 MR. KWUN: Objection. Form. 21 THE DEPONENT: I don't know anyone that's 22 investing enormous amounts of effort in an API for 23 Java. I think that was a -- that was a relatively 24 modest effort by comparison to the overall thing. 25 And I would draw the analogy to like if</p> <p style="text-align: right;">Page 119</p>	<p>1 any of the other APIs you address are protected by 2 copyright? 3 A. You mean did I search on the specific 4 case of, say, the BIOS to see if some court had 5 ruled that the code itself could be -- the API 6 itself could be copyrighted? 7 Q. Correct. 8 A. I did search the Internet a bit on that 9 and I didn't find anything. 10 Q. Right. 11 So you have no -- you don't -- you don't 12 actually know, one way or the other, whether any of 13 the APIs that you address in your report have been 14 found to be copyrightable or uncopyrightable? 15 A. No. 16 MR. KWUN: Objection. Form. 17 THE DEPONENT: Yeah, and that's a problem 18 with your Internet searches. You can't usually get 19 a definitive answer. 20 Q. (By Mr. Ramsey) Okay. But I just -- I just 21 want to be clear. 22 You don't actually know, one way or the 23 other, and did not look at whether the APIs 24 addressed in your report were found to be 25 copyrightable or uncopyrightable?</p> <p style="text-align: right;">Page 121</p>

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<p>1 I saw some statements about, when we open sourced 2 JDK, that -- what that would mean. 3 Q. (By Mr. Ramsey) Okay. You're not an -- 4 you're not an open source licensing expert; isn't that 5 true? 6 A. Yeah, I don't know if I would say I'm -- 7 I'm an expert. I worked on some open source 8 projects. 9 Q. But your -- in your report, you had -- 10 you provide no opinions about open source 11 licensing? 12 A. Yes. 13 Q. Okay. So when you were preparing your 14 opinions in your report, it's true that you did not 15 look at Google's licenses for its maps, search or 16 AdWords APIs; isn't that true? 17 A. No, I don't remember coming across those. 18 Q. Okay. And when you prepared your 19 opinions, you didn't look at the actual full body 20 of API declarations or SS -- the organization of 21 those declarations at issue in this case, true? 22 MR. KWUN: Objection. Form. 23 THE DEPONENT: Are you talking about the 24 37 Java APIs? 25 Q. (By Mr. Ramsey) Correct.</p> <p style="text-align: right;">Page 138</p>	<p>1 A. Correct. 2 MR. KWUN: Objection. Form. 3 Q. (By Mr. Ramsey) And you didn't talk to any 4 Google engineers in relation to your opinions in your 5 report, true? 6 MR. KWUN: Objection. Form. 7 THE DEPONENT: Correct. 8 Q. (By Mr. Ramsey) So you haven't formed any -- 9 any opinions regarding Google's actual belief, in 2007, 10 regarding the APIs at issue? 11 A. What do you mean by Google's belief 12 in 2007? So you -- Google is a lot of people. I 13 did talk to some Google engineers who were aware 14 that Sun was open sourcing Java, and they thought 15 that would be a good thing -- 16 Q. Okay -- 17 A. -- so... 18 Q. -- my question is more specific. 19 My question is: In forming your 20 opinions, you didn't talk to any -- anybody at 21 Google about what their actual belief was regarding 22 the 37 APIs when they were developing Android? 23 MR. KWUN: Objection. Form. 24 THE DEPONENT: Well, back in 2007, I 25 might have -- have talked to some people at Sun and</p> <p style="text-align: right;">Page 140</p>
<p>1 A. Are you asking if I went back and looked 2 at all those APIs? 3 Q. That's right. It's -- let me just re-ask 4 my question. 5 It's true that you, in the course of 6 preparing your opinions, you did not examine the 7 entire full body of API declarations and their 8 organization that is at issue in this case? 9 A. No. 10 MR. KWUN: Objection. Form. 11 Q. (By Mr. Ramsey) All right. And it's true 12 that you did not attach or refer in your report to any 13 Java API source code; isn't that true? 14 A. That's correct. I did have familiarity 15 with a lot of Java already, so when someone would 16 refer to a Java API, I generally know what they 17 were talking about. 18 Q. Okay. But you didn't -- my question is, 19 you -- specifically, you didn't refer to any Java 20 source code or discuss that source code in your 21 report? 22 A. That's true. 23 Q. You didn't talk to any formal Sun or 24 Oracle engineers in relation to your opinions here, 25 true?</p> <p style="text-align: right;">Page 139</p>	<p>1 at Google, but mostly as -- as, you know, informal 2 connections with old friends. So -- but my general 3 belief with the -- from the Google folks was that 4 they thought that this would -- this was a great 5 thing that -- you know, this -- this would be a 6 good thing for them to use, the Java APIs, and that 7 they didn't think they needed a license. 8 MR. RAMSEY: All right. So I'm going to 9 move to strike that as nonresponsive. 10 Q. (By Mr. Ramsey) You didn't talk to anybody 11 who was actually working on Android regarding their 12 belief concerning the 37 APIs at issue in this case? 13 MR. KWUN: Objection. Form. 14 THE DEPONENT: Well, I don't know if they 15 were working on -- I talked to Josh Bloch, for 16 example. I don't know what he was working on at 17 the time I talked to him. 18 Q. (By Mr. Ramsey) All right. In your report, 19 you don't -- you don't recount any conversations with 20 anybody at Google who was working on Android, that's 21 true? 22 A. Yes. 23 Q. And you don't actually examine any 24 documents regarding the development of Android; 25 isn't that true?</p> <p style="text-align: right;">Page 141</p>

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<p>1 A. Cedar, which was preceded by Mesa, which 2 was a variant. 3 Q. Wasn't one of the -- I don't know if it 4 was a project name or a product name initially for 5 Java, Oak? 6 A. Yes. 7 Q. Were you involved in that project at all? 8 A. I was aware of the Oak project when -- 9 when that was going on, yes. 10 Q. Okay. What is your understanding of why 11 the Java platform was initially developed by Sun? 12 MR. KWUN: Objection. Form. 13 THE DEPONENT: That's a good question. I 14 don't know all the history, but it's -- my 15 understanding is that it was originally intended 16 for set-top boxes for TVs, and -- and then it's 17 purpose evolved. I liked it because there was 18 finally a good programming language that was also 19 likely to get off the ground, and so I jumped on 20 the bandwagon. 21 Q. (By Mr. Ramsey) Okay. Are you familiar with 22 a -- an early Java product called Star7? 23 A. Yes. That was a predecessor to Oak, as I 24 understand it. 25 Q. And isn't it true that Star7 ran a</p> <p style="text-align: right;">Page 150</p>	<p>1 that -- that Linux re-implemented UNIX APIs. 2 A. Yes. 3 Q. And Linux is based on the POSIX standard, 4 P-O-S-I-X, true? 5 A. Well, officially that -- that's the -- 6 it's kind of like the cart before the horse though, 7 because POSIX was -- POSIX was a standardization of 8 UNIX, and then Linux followed that. 9 Q. What do you mean, "POSIX was a 10 standardization of UNIX"? 11 A. Well, as I understand it, the POSIX 12 standard was -- was a specification of an API that 13 basically came from the UNIX -- AT&amp;T UNIX. So they 14 wanted to standardize it. 15 Q. So POSIX was a formal standardization of 16 UNIX, true? 17 A. Yes. 18 Q. And POSIX was created through a formal 19 standard setting body such as ISO or ANSI. 20 A. I believe so, yes. 21 Q. Okay. And it was only after POSIX was 22 a -- was a public standard through the standard 23 setting bodies that Linux re-implemented the 24 standard? 25 A. I don't know that that's the case.</p> <p style="text-align: right;">Page 152</p>
<p>1 version of Java, true? 2 A. Well -- 3 MR. KWUN: Objection. Form. 4 THE DEPONENT: We didn't call it Java, 5 but yes. 6 Q. (By Mr. Ramsey) Okay. And Star7 was a small 7 touchscreen mobile device, true? 8 MR. KWUN: Objection. Form. 9 THE DEPONENT: Well, Star7 referred to 10 what you had to punch on your telephone to reach 11 the people in that group, I think. So -- but 12 this -- yeah, I don't know much about the hardware 13 they were working with. 14 Q. (By Mr. Ramsey) Have you actually seen a 15 Star7 device? 16 A. No. 17 Q. Okay. Are you aware that it had a 18 touchscreen interface? 19 MR. KWUN: Objection. Form. 20 THE DEPONENT: I'm not sure. It's been a 21 long time. 22 Q. (By Mr. Ramsey) Okay. I would like -- I 23 would like to talk about the UNIX APIs for a bit, okay? 24 A. Okay. 25 Q. You mentioned in your report, you assert</p> <p style="text-align: right;">Page 151</p>	<p>1 Q. Okay. So you don't -- you don't -- you 2 don't actually know the timing of when -- 3 A. That's right. 4 Q. -- Linux implemented -- 5 A. That's right. 6 Q. -- the UNIX APIs? 7 A. Yes. And there were other UNIXs in 8 between -- like Berkeley UNIX, and so on -- that 9 was forked off of AT&amp;T UNIX. 10 Q. Okay. And you are -- you are aware that 11 the UNIX operating system is made available under 12 the GNU, that's G-N-U, general public license, 13 true? 14 A. I that's the case, yes. 15 Q. Okay. You don't know anything about the 16 specific terms or requirements of the -- 17 A. No. 18 Q. -- GNU, general public license? 19 A. Not really, no. 20 Q. Okay. During the course of your work on 21 your research -- your -- your expert report, you 22 didn't do any -- any scholarly research regarding 23 the legal history of protection of software, true? 24 A. Correct. 25 MR. KWUN: Objection. Form.</p> <p style="text-align: right;">Page 153</p>

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<p>1 THE DEPONENT: Correct.</p> <p>2 Q. (By Mr. Ramsey) And during the course of</p> <p>3 your -- preparing your expert report, you didn't do any</p> <p>4 research regarding the business history that -- the</p> <p>5 history of business models concerning APIs?</p> <p>6 MR. KWUN: Objection. Form.</p> <p>7 THE DEPONENT: Well, I did some Google</p> <p>8 searches. I'm trying to figure out -- looking for</p> <p>9 some examples historically.</p> <p>10 Q. (By Mr. Ramsey) But you -- you didn't</p> <p>11 address in your report, and you didn't research,</p> <p>12 companies that have actually exerted control over their</p> <p>13 APIs, such as Microsoft?</p> <p>14 MR. KWUN: Objection. Form.</p> <p>15 THE DEPONENT: Well, I did -- I did</p> <p>16 research that a bit, you know, the -- the -- the</p> <p>17 history with Microsoft and this -- and this Wine</p> <p>18 interface and other clones. And of course, I was,</p> <p>19 you know, historically there when it happened to</p> <p>20 see where they succeeded and failed.</p> <p>21 Q. (By Mr. Ramsey) I notice in your report when</p> <p>22 you discuss Wine, you do not discuss how Wine was</p> <p>23 developed, correct?</p> <p>24 A. That's true.</p> <p>25 Q. Do you agree with me that the way Wine is</p> <p style="text-align: right;">Page 154</p>	<p>1 cautious to me.</p> <p>2 Q. (By Mr. Ramsey) Can you identify any API in</p> <p>3 Wine that was copied from copyrighted Microsoft code?</p> <p>4 MR. KWUN: Objection. Form.</p> <p>5 THE DEPONENT: Copyrighted source code</p> <p>6 for the implementation; no, I would be very</p> <p>7 surprised if there was.</p> <p>8 Q. (By Mr. Ramsey) You believe it's possible</p> <p>9 that Microsoft might sue Wine, don't you agree --</p> <p>10 MR. KWUN: Objection --</p> <p>11 Q. (By Mr. Ramsey) -- for use of the Microsoft</p> <p>12 APIs?</p> <p>13 MR. KWUN: Objection. Form.</p> <p>14 THE DEPONENT: They could try to do that.</p> <p>15 Q. (By Mr. Ramsey) And that wouldn't be a</p> <p>16 surprising thing to you, given Microsoft's business</p> <p>17 history and position regarding its Windows APIs?</p> <p>18 MR. KWUN: Objection. Form.</p> <p>19 THE DEPONENT: I would be a little</p> <p>20 surprised because I think that most of the industry</p> <p>21 would be against them, but I -- I can see them</p> <p>22 doing that, yes.</p> <p>23 Q. (By Mr. Ramsey) Okay. And -- and</p> <p>24 developers -- if you ask developers right now, "Well,</p> <p>25 do you think that Microsoft might attempt to suppress</p> <p style="text-align: right;">Page 156</p>
<p>1 developed is by what is known as block-box</p> <p>2 development?</p> <p>3 A. Yes.</p> <p>4 MR. KWUN: Objection. Form.</p> <p>5 THE DEPONENT: Yeah, Cleanroom, or</p> <p>6 whatever you call it, where they didn't look at the</p> <p>7 source code and they implemented their own.</p> <p>8 Q. (By Mr. Ramsey) Right. So in the context of</p> <p>9 Wine, the only input to development of Wine is a binary</p> <p>10 Microsoft DLL file; isn't that true?</p> <p>11 MR. KWUN: Objection. Form.</p> <p>12 THE DEPONENT: Yes and no. I mean,</p> <p>13 someone had derived what the API was, which you can</p> <p>14 do from the binary.</p> <p>15 Q. (By Mr. Ramsey) But you had -- in your</p> <p>16 report, you did not discuss at all what resources were</p> <p>17 available to the developers of Wine, in terms of API</p> <p>18 specifications or code, or anything else, right?</p> <p>19 A. Yes. As I understand it, they had to</p> <p>20 deduce what the API was, and then re-implement it.</p> <p>21 Q. Okay. Don't you agree that Wine is an</p> <p>22 example of attempting to be very cautious about</p> <p>23 what is copied and what is not?</p> <p>24 MR. KWUN: Objection. Form.</p> <p>25 THE DEPONENT: Yes, it sounds very</p> <p style="text-align: right;">Page 155</p>	<p>1 the use of the Windows APIs in Wine," some portion of</p> <p>2 them would say, "I can see that happening," and some</p> <p>3 other portion might say, "I can't see that happening."</p> <p>4 A. Yes, certainly there will be people with</p> <p>5 both beliefs.</p> <p>6 Q. And so different segments of the</p> <p>7 developer community might have different</p> <p>8 expectations about whether it's risky or</p> <p>9 permissible, or not, to use the Wine APIs?</p> <p>10 MR. KWUN: Objection. Form.</p> <p>11 THE DEPONENT: It's my contention that</p> <p>12 the majority of the developer community would think</p> <p>13 that it's okay to re-implement an API; but, yes,</p> <p>14 there will be people on both sides.</p> <p>15 Q. (By Mr. Ramsey) Right. Even if developers</p> <p>16 believe that, "I should be able to use APIs," those</p> <p>17 same developers may recognize that there are questions</p> <p>18 and risk in doing so. It's not a decisive belief.</p> <p>19 A. Yes.</p> <p>20 MR. KWUN: Objection. Form.</p> <p>21 THE DEPONENT: Yes.</p> <p>22 Q. (By Mr. Ramsey) And you have not done any</p> <p>23 empirical work to empirically measure the amount and</p> <p>24 degree of whether developers believe that they are</p> <p>25 actually able to reuse and re-implement the APIs versus</p> <p style="text-align: right;">Page 157</p>



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<p>1 what they want to be the world?</p> <p>2 MR. KWUN: Objection. Form.</p> <p>3 THE DEPONENT: I haven't done any</p> <p>4 empirical research on that, yes --</p> <p>5 Q. (By Mr. Ramsey) Okay. Do you --</p> <p>6 A. -- just -- just talking to people over --</p> <p>7 for 20 years.</p> <p>8 Q. Do you -- do you believe that if APIs</p> <p>9 were found to be copyright protected and copying of</p> <p>10 them is not fair use that -- in this case, that</p> <p>11 while some Java developers would be unhappy, they</p> <p>12 would be able to adapt to the new situation in</p> <p>13 Android?</p> <p>14 MR. KWUN: Objection. Form.</p> <p>15 THE DEPONENT: I think a lot of people</p> <p>16 would be unhappy if they learn that this was not a</p> <p>17 fair use of an API. And I think a number of groups</p> <p>18 may lobby Congress to change the laws with respect</p> <p>19 to API copyright. And -- and with respect to</p> <p>20 Android, it would be kind of a mess unless there</p> <p>21 was an easy path from the current Android platform</p> <p>22 to something that Google could actually support</p> <p>23 legally.</p> <p>24 Q. (By Mr. Ramsey) All right. So let me -- let</p> <p>25 me ask a slightly different question.</p> <p style="text-align: right;">Page 158</p>	<p>1 Q. -- Android developers are technically</p> <p>2 capable of learning new APIs that -- that Google</p> <p>3 may implement in Android that are different from</p> <p>4 the current APIs?</p> <p>5 A. Yes. That would be bad for Oracle most</p> <p>6 of all --</p> <p>7 Q. All right.</p> <p>8 A. -- because Google --</p> <p>9 Q. My question is: Android developers are</p> <p>10 technically capable of learning new APIs that</p> <p>11 Google may implement in Android that are different</p> <p>12 from the current APIs?</p> <p>13 A. Yes.</p> <p>14 Q. Did you do any comparative analysis</p> <p>15 between what I would call the -- all the other</p> <p>16 non-Java APIs in your report and the Java APIs at</p> <p>17 issue in this case?</p> <p>18 A. I mean only at a high level, yes.</p> <p>19 Q. But you didn't sit down and examine, side</p> <p>20 by side, whether the other APIs -- Wine, Linux,</p> <p>21 Microsoft, IBM, BIOS -- were more or less similar</p> <p>22 or dissimilar to the Java APIs at issue?</p> <p>23 A. At some level, yes; I mean, whether they</p> <p>24 were a platform versus a library, versus a way of</p> <p>25 connecting to other programs, and so on.</p> <p style="text-align: right;">Page 160</p>
<p>1 Do you believe that if the APIs in this</p> <p>2 case were found to be copyright protected, and</p> <p>3 copying of them is not fair use, that while some</p> <p>4 JAVA developers would be unhappy, if Google gave</p> <p>5 them new APIs and educated them about the</p> <p>6 situation, they could adapt?</p> <p>7 MR. KWUN: Objection. Form.</p> <p>8 THE DEPONENT: Well, there's a -- there's</p> <p>9 a difference between them being able to adapt and</p> <p>10 being willing to adapt, I imagine.</p> <p>11 Q. (By Mr. Ramsey) Do you believe that their --</p> <p>12 that developers, if given a resource and new APIs by</p> <p>13 Google to transition to new APIs, could do so?</p> <p>14 MR. KWUN: Objection. Form.</p> <p>15 THE DEPONENT: They are technically</p> <p>16 capable of doing so, given enough time.</p> <p>17 Q. (By Mr. Ramsey) Okay. And so with some time</p> <p>18 and investment by developers and Google, current</p> <p>19 Android developers could transition to new and</p> <p>20 different Android APIs if necessary?</p> <p>21 A. Yes. But I think that would be a bad</p> <p>22 thing.</p> <p>23 Q. Okay. Even -- putting aside your view</p> <p>24 that it may not be a great thing --</p> <p>25 A. Yeah.</p> <p style="text-align: right;">Page 159</p>	<p>1 Q. Okay. You didn't sit down, for example,</p> <p>2 with the IBM BIOS API specification and put it next</p> <p>3 to the Java SE API specification and look for</p> <p>4 similarities or differences, true?</p> <p>5 A. Correct.</p> <p>6 Q. And you didn't sit down with the Wine API</p> <p>7 specification and the Java SE 5 API specification</p> <p>8 and look at them and compare, side by side, are</p> <p>9 these similar or different?</p> <p>10 A. Yes.</p> <p>11 Q. You also didn't put side by side the UNIX</p> <p>12 or Linux API specifications and the Java API</p> <p>13 specifications and compare to see how similar or</p> <p>14 different they were?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. You didn't set -- put down on --</p> <p>17 in front of you the SQL, or any other database, API</p> <p>18 specification and the Java SE 5 specification, and</p> <p>19 compare how similar or different they are?</p> <p>20 A. Yes. I don't know what I would compare</p> <p>21 there, the number of lines or the -- whether they</p> <p>22 use methods or procedures, or whatever -- it's sort</p> <p>23 of --</p> <p>24 Q. Right --</p> <p>25 A. -- apples and oranges.</p> <p style="text-align: right;">Page 161</p>

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<p>1 of the article --</p> <p>2 A. Yes.</p> <p>3 Q. -- in Exhibit 5171.</p> <p>4 A. Yes. I agree with the last line,</p> <p>5 "Yikes." This makes a mess of things.</p> <p>6 Q. All right. So if you could, please turn</p> <p>7 to the fourth page of the article. Let me know</p> <p>8 when you are there.</p> <p>9 A. Yes.</p> <p>10 Q. In the article that you -- you are</p> <p>11 looking at that is discussing the protection of</p> <p>12 APIs, in this case in particular there's a quote</p> <p>13 from a fellow Steve Wilmott, CEO of 3Scale.</p> <p>14 Do you see that?</p> <p>15 A. I see the -- oh, yeah, I see that, yes.</p> <p>16 Q. Are you familiar with 3Scale?</p> <p>17 A. Not particularly, no.</p> <p>18 Q. Okay. And 3Scale, you agree, is</p> <p>19 described here as an API management company?</p> <p>20 A. Okay.</p> <p>21 Q. According to this article, Mr. Wilmott</p> <p>22 states, and I quote: "It's always been a legal</p> <p>23 gray area whether an API that a company publishes</p> <p>24 is reusable and I would say that it just became</p> <p>25 more dangerous to use someone's API design without</p> <p style="text-align: right;">Page 174</p>	<p>1 to Java language specification -- the language</p> <p>2 specification. The APIs are libraries.</p> <p>3 Q. Okay. So you can use the Java language</p> <p>4 syntax in the Java language specification without</p> <p>5 using the APIs?</p> <p>6 MR. KWUN: Objection. Form.</p> <p>7 THE DEPONENT: Yes, you could.</p> <p>8 Q. (By Mr. Ramsey) Okay. Did you do any review</p> <p>9 of any -- any licenses at all for APIs, over the course</p> <p>10 of the last 20 or 30 years, in preparing your opinions?</p> <p>11 MR. KWUN: Objection. Form.</p> <p>12 THE DEPONENT: Over the last 30 years, I</p> <p>13 have looked at lots of licenses but not as part of</p> <p>14 preparation for this report.</p> <p>15 Q. (By Mr. Ramsey) Okay. Well, you didn't rely</p> <p>16 on any licenses for APIs in preparing your opinions,</p> <p>17 right?</p> <p>18 A. Well, I think I relied on my recollection</p> <p>19 of APIs and their licenses, yes.</p> <p>20 Q. You remember, earlier today we talked</p> <p>21 about Exhibit 5169, and 5170, the -- the Java --</p> <p>22 A. Yes.</p> <p>23 Q. -- API that you were involved with,</p> <p>24 right?</p> <p>25 A. Yes.</p> <p style="text-align: right;">Page 176</p>
<p>1 consulting them first."</p> <p>2 Do you see that?</p> <p>3 A. Yup.</p> <p>4 Q. So you agree with me that at least one</p> <p>5 person's view in the software development community</p> <p>6 is that it's always been a legal gray area whether</p> <p>7 an API that a company publishes is reusable?</p> <p>8 A. Yup, I see he says that.</p> <p>9 Q. And you see that -- you may have noticed</p> <p>10 in other parts of this article, there are views</p> <p>11 expressed that APIs should be reusable by some</p> <p>12 commenters?</p> <p>13 A. Yes.</p> <p>14 Q. So you agree with me that there's all --</p> <p>15 more than one view in the software industry about</p> <p>16 whether APIs are reusable?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. All right. You have not done any</p> <p>19 analysis of the Java language specification in your</p> <p>20 expert report; isn't that true?</p> <p>21 A. Correct.</p> <p>22 Q. For example, you have not compared any</p> <p>23 aspects of the APIs that are at issue in this case</p> <p>24 to the Java language specification, right?</p> <p>25 A. Well, I don't know what I would compare</p> <p style="text-align: right;">Page 175</p>	<p>1 Q. And in that particular Java API, there</p> <p>2 was a specification license that we discussed; do</p> <p>3 you recall that?</p> <p>4 A. Yeah --</p> <p>5 MR. KWUN: Objection. Form.</p> <p>6 THE DEPONENT: -- yes, I recall that.</p> <p>7 Q. (By Mr. Ramsey) And we noted that the</p> <p>8 specification license regarding your Java API provided</p> <p>9 some limitations on use of the APIs --</p> <p>10 MR. KWUN: Objection. Form.</p> <p>11 Q. (By Mr. Ramsey) -- stated here.</p> <p>12 MR. KWUN: Objection. Form.</p> <p>13 Q. (By Mr. Ramsey) Do you recall that?</p> <p>14 MR. KWUN: Objection. Form.</p> <p>15 THE DEPONENT: Yes.</p> <p>16 Q. (By Mr. Ramsey) And it's true that, in your</p> <p>17 opinion -- in your opinion, for example, you did not</p> <p>18 consider the specification license that was in the Java</p> <p>19 API that you and I -- the JDBC Java API that you and I</p> <p>20 discussed?</p> <p>21 A. I did not consider it; what do you mean?</p> <p>22 Q. Well, in the course of preparing your</p> <p>23 expert opinions, you didn't consider Java</p> <p>24 specification license, which is a license that you</p> <p>25 and I discussed today?</p> <p style="text-align: right;">Page 177</p>



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<p>1 the AdWords API agreement we just read states that are</p> <p>2 there limitations in the agreement on, quote, your</p> <p>3 right to use, copy and retain your copy of the AdWords</p> <p>4 API in the AdWords API specifications.</p> <p>5 You remember that part, right?</p> <p>6 MR. KWUN: Objection. Form.</p> <p>7 THE DEPONENT: Let me call your attention</p> <p>8 to what -- it says what using the AdWords API means</p> <p>9 right after definition there, you see?</p> <p>10 And it says the use of the markup</p> <p>11 language described in the API specification, so</p> <p>12 that doesn't mean I can't keep a copy of the API,</p> <p>13 or that I can't copy it.</p> <p>14 It says accessing the Google servers</p> <p>15 through that API; well, I certainly can't do that</p> <p>16 if I'm not going to use AdWords anymore.</p> <p>17 Q. (By Mr. Ramsey) Well --</p> <p>18 A. Sending information to my account,</p> <p>19 receive information back, distribute under -- these</p> <p>20 are all things that are directly relevant to using</p> <p>21 their service --</p> <p>22 Q. Okay.</p> <p>23 A. -- so it's not like I'm re-implementing</p> <p>24 it in the sense that Google has done with Java API.</p> <p>25 Q. I think we agree that -- that this</p> <p style="text-align: right;">Page 202</p>	<p>1 you agree with me that from our -- from our</p> <p>2 investigation of the AdWords API terms and the AdWords</p> <p>3 API specification, that there's some pretty granular</p> <p>4 questions about what limitations might be imposed on</p> <p>5 the use of an API in one context or another, true?</p> <p>6 MR. KWUN: Objection. Form.</p> <p>7 THE DEPONENT: Yes, there are often</p> <p>8 questions about the limitations, as we have seen in</p> <p>9 some of the other documents.</p> <p>10 Q. (By Mr. Ramsey) And there's many fine-grain</p> <p>11 calls about whether, in this particular AdWords context</p> <p>12 or another API context, the set of expectations are --</p> <p>13 are known, or set, or -- or understood?</p> <p>14 MR. KWUN: Objection. Form.</p> <p>15 THE DEPONENT: Yes. I'm just saying,</p> <p>16 your example is not very convincing if you are</p> <p>17 trying to show me that Google is restricting the</p> <p>18 APIs in the same sense that Oracle is trying to.</p> <p>19 Q. (By Mr. Ramsey) Well, regardless of whether</p> <p>20 Google is restricting its APIs in exactly the same way</p> <p>21 as this case, you agree that Google is, in some manner,</p> <p>22 restricting use of some of its APIs?</p> <p>23 MR. KWUN: Objection. Form.</p> <p>24 THE DEPONENT: Apparently so.</p> <p>25 Q. (By Mr. Ramsey) Okay. And you agree with me</p> <p style="text-align: right;">Page 204</p>
<p>1 agreement is saying with -- with respect to the</p> <p>2 particular markup language defining the</p> <p>3 AdWords API --</p> <p>4 A. Yes.</p> <p>5 Q. -- in a particular context, we, Google,</p> <p>6 are imposing limitations on the right to use, copy</p> <p>7 and retain --</p> <p>8 MR. KWUN: Objection.</p> <p>9 Q. (By Mr. Ramsey) -- as a general matter, that</p> <p>10 is true?</p> <p>11 MR. KWUN: Objection. Form.</p> <p>12 THE DEPONENT: Okay. I don't see this as</p> <p>13 an apples-and-apples comparison to --</p> <p>14 Q. (By Mr. Ramsey) I'm not looking -- I just</p> <p>15 want to know, in the context of the API, Google is</p> <p>16 saying to licensees: In this domain, we are going to</p> <p>17 limit your ability to -- and your right to use, copy</p> <p>18 and retain your copy of the AdWords API commands, if</p> <p>19 you will?</p> <p>20 MR. KWUN: Objection. Form.</p> <p>21 THE DEPONENT: I guess I don't agree.</p> <p>22 The underlying words say something different when</p> <p>23 you look at what the definitions are, of the</p> <p>24 AdWords API and so on.</p> <p>25 Q. (By Mr. Ramsey) Okay. Well, this is -- do</p> <p style="text-align: right;">Page 203</p>	<p>1 that the AdWords API agreement doesn't just talk about</p> <p>2 use, it says that it's restricting the right to use,</p> <p>3 copy and retain a copy of the AdWords API. So -- so</p> <p>4 the agreement specifically limits copying?</p> <p>5 MR. KWUN: Objection. Form.</p> <p>6 THE DEPONENT: I can't say. I think you</p> <p>7 should be having this conversation with an expert</p> <p>8 on licensing, not an expert on -- on technology,</p> <p>9 but yes.</p> <p>10 Q. (By Mr. Ramsey) Okay. Do you believe that</p> <p>11 developers in an ecosystem using the AdWords APIs --</p> <p>12 A. Yeah.</p> <p>13 Q. -- may form their view about what is</p> <p>14 expected in relation to the input of a licensing</p> <p>15 expert, for example?</p> <p>16 MR. KWUN: Objection. Form.</p> <p>17 THE DEPONENT: Yeah, they could talk to a</p> <p>18 licensing expert.</p> <p>19 Q. (By Mr. Ramsey) And so developers'</p> <p>20 understanding what they should expect with regard to</p> <p>21 the AdWords APIs may turn on the input of lawyers or</p> <p>22 licensing experts.</p> <p>23 MR. KWUN: Objection. Form.</p> <p>24 THE DEPONENT: Developers do that</p> <p>25 sometime, yes, they go find an expert on the</p> <p style="text-align: right;">Page 205</p>

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<p>1 licensing word.</p> <p>2 Q. (By Mr. Ramsey) Okay. So I note in your</p> <p>3 report you -- and we have talked about a number of</p> <p>4 other APIs other than the Java APIs; do you recall</p> <p>5 that?</p> <p>6 A. Yes.</p> <p>7 Q. We talked about Linux, and Wine, and</p> <p>8 UNIX, and SQL APIs; you recall that?</p> <p>9 A. Yes.</p> <p>10 Q. But you don't talk about Google APIs in</p> <p>11 your report.</p> <p>12 Just as a factual matter that's true,</p> <p>13 right?</p> <p>14 A. Yes. I didn't see any good examples in</p> <p>15 the Google APIs.</p> <p>16 Q. Okay. But were you instructed not to</p> <p>17 look at Google APIs?</p> <p>18 A. No, no. I just searched around the</p> <p>19 Internet, and there didn't seem to be any --</p> <p>20 anything about the Google APIs that were --</p> <p>21 Q. Okay.</p> <p>22 A. -- an issue.</p> <p>23 Q. Did you even -- beyond the Google</p> <p>24 AdWords APIs, did you consider the Google Earth or</p> <p>25 Google Maps APIs in forming your opinions?</p> <p style="text-align: right;">Page 206</p>	<p>1 for your engagement in this matter to date?</p> <p>2 A. \$300 an hour.</p> <p>3 Q. Okay. And what is the total amount of</p> <p>4 compensation for your work on this matter that</p> <p>5 you've received to date?</p> <p>6 A. I would say I have probably worked a week</p> <p>7 so far, so that's 40 hours. What's that make,</p> <p>8 12,000?</p> <p>9 Q. Okay. And prior to -- you mentioned in</p> <p>10 your expert report, you refer to work on an amicus</p> <p>11 brief.</p> <p>12 Did you --</p> <p>13 A. That was free. And in fact, I'm -- I</p> <p>14 have cut my usual rate of \$600 in half for Google</p> <p>15 on this, because I believe that this is important</p> <p>16 to the computer science community.</p> <p>17 Q. Okay. So you have a strong personal view</p> <p>18 about whether the use of the APIs at issue should</p> <p>19 be fair use or not; is that fair to say?</p> <p>20 A. When I -- when I am an expert witness, I</p> <p>21 generally won't take cases where I don't agree with</p> <p>22 what the client wants me to argue.</p> <p>23 Q. Okay. And you understand what your views</p> <p>24 are about the --</p> <p>25 A. Yes.</p> <p style="text-align: right;">Page 208</p>
<p>1 A. Not those two in particular, no.</p> <p>2 Q. Okay. And you didn't examine of the</p> <p>3 licensing terms associated with the Google Maps or</p> <p>4 Google Earth APIs, right?</p> <p>5 A. Well, I have had some experience looking</p> <p>6 at the licensing terms, but -- they -- they</p> <p>7 didn't -- it didn't ring a bell, with respect to</p> <p>8 this case, as being relevant.</p> <p>9 Q. All right. But you didn't go -- so you</p> <p>10 are saying that, as you are preparing your report,</p> <p>11 you thought: Hmm, maybe I should go look at the</p> <p>12 Google Maps and Google Earth APIs --</p> <p>13 A. No. I didn't -- I didn't think it would</p> <p>14 be relevant.</p> <p>15 Q. Okay. You -- that means you did think</p> <p>16 about those APIs and determined not to go look at</p> <p>17 them?</p> <p>18 A. Yeah, briefly.</p> <p>19 Q. Okay. So you didn't go look and check at</p> <p>20 what precisely those terms or limitations might</p> <p>21 be --</p> <p>22 A. No, I didn't. I did searches and looked</p> <p>23 for APIs that were licensed, yes.</p> <p>24 Q. Okay. You know, how -- just a sort of a</p> <p>25 side question: How much money have you been paid</p> <p style="text-align: right;">Page 207</p>	<p>1 Q. -- the use of APIs in this case?</p> <p>2 A. Yes. I believe that APIs should be</p> <p>3 freely re-implementable in general --</p> <p>4 Q. Okay.</p> <p>5 A. -- with a few exceptions perhaps.</p> <p>6 Q. But you -- and you've stated today that</p> <p>7 you have an impression about some of your other</p> <p>8 colleagues in the industry, and that they share</p> <p>9 your views.</p> <p>10 Is that true that it's your impression?</p> <p>11 A. Yes.</p> <p>12 MR. KWUN: Objection. Form.</p> <p>13 THE DEPONENT: My impression is, the</p> <p>14 majority of my colleagues would agree.</p> <p>15 Q. (By Mr. Ramsey) You have not done a survey</p> <p>16 to interview a -- a statistically significant --</p> <p>17 A. Yes --</p> <p>18 Q. -- sample --</p> <p>19 A. -- that's right.</p> <p>20 Q. -- of people to understand whether they</p> <p>21 actually share your view or not?</p> <p>22 A. Yes, that's right.</p> <p>23 MR. KWUN: And, Dr. Cattell, I know it's</p> <p>24 getting later --</p> <p>25 THE DEPONENT: Oh, I am sorry --</p> <p style="text-align: right;">Page 209</p>

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<p>1 MR. KWUN: And we're getting a lot of</p> <p>2 repeated questions --</p> <p>3 THE DEPONENT: -- and we're trying to</p> <p>4 finish up. Right. Right.</p> <p>5 MR. KWUN: -- which maybe makes it</p> <p>6 harder --</p> <p>7 THE DEPONENT: Okay.</p> <p>8 MR. KWUN: -- but you do need to -- and</p> <p>9 including even when I'm talking now --</p> <p>10 THE DEPONENT: Give you a chance to</p> <p>11 object.</p> <p>12 MR. KWUN: -- you need to wait until one</p> <p>13 person is finished talking --</p> <p>14 THE DEPONENT: Okay.</p> <p>15 MR. KWUN: -- so that we have a clean</p> <p>16 record of what has been asked and what your</p> <p>17 answer --</p> <p>18 THE DEPONENT: I understand.</p> <p>19 MR. KWUN: -- because otherwise you might</p> <p>20 say yes, and it may turn out that Dave says no at</p> <p>21 the end, and then you're actually answering the</p> <p>22 wrong questions.</p> <p>23 THE DEPONENT: Yeah, it's late and I'm</p> <p>24 getting tired. I'm sorry.</p> <p>25 Q. (By Mr. Ramsey) So, Dr. Cattell, when you</p> <p style="text-align: right;">Page 210</p>	<p>1 MR. KWUN: Okay.</p> <p>2 THE VIDEOGRAPHER: We are off the record</p> <p>3 at 2:32.</p> <p>4 (Recess taken.)</p> <p>5 THE VIDEOGRAPHER: This marks the</p> <p>6 beginning of the Disc No. 4, to the deposition of</p> <p>7 the Dr. Roderic Cattell. We are now back on the</p> <p>8 record at 2:39.</p> <p>9 Q. (By Mr. Ramsey) Okay. Dr. Cattell, back</p> <p>10 in the -- the mid-2000s, you understand that Sun</p> <p>11 had a variety of licenses associated with the</p> <p>12 Java APIs, correct?</p> <p>13 MR. KWUN: Objection. Form.</p> <p>14 THE DEPONENT: Yes.</p> <p>15 Q. (By Mr. Ramsey) And some of them were</p> <p>16 commercial licenses that were specifically negotiated;</p> <p>17 do you understand that?</p> <p>18 MR. KWUN: Objection. Form.</p> <p>19 THE DEPONENT: Yes.</p> <p>20 Q. (By Mr. Ramsey) And you have talked about</p> <p>21 the specification license a bit associated with the</p> <p>22 Java API specification today.</p> <p>23 You understand that license, right?</p> <p>24 MR. KWUN: Objection. Form.</p> <p>25 THE DEPONENT: Yes.</p> <p style="text-align: right;">Page 212</p>
<p>1 were preparing your expert report, were you on any</p> <p>2 medications that would prevent you from providing your</p> <p>3 best opinions and analysis in your report?</p> <p>4 A. No, I didn't go on any medications until</p> <p>5 February, when I had brain surgery.</p> <p>6 Q. Okay. And sitting here today, are you on</p> <p>7 any medications that would -- that prevent you from</p> <p>8 providing your best and most accurate opinions and</p> <p>9 testimony today?</p> <p>10 A. No, I am on no medications right now.</p> <p>11 Q. And I'm sorry to ask, this is actually</p> <p>12 quite routine --</p> <p>13 A. Yeah.</p> <p>14 Q. -- and I apologize, but I just want to --</p> <p>15 want to make sure that, both when you are preparing</p> <p>16 your report and sitting here today, you are -- you</p> <p>17 believe you are fully capable of providing your</p> <p>18 best opinions and analysis that you draw in this</p> <p>19 case?</p> <p>20 A. Yes. I'm just a little tired right now.</p> <p>21 Q. Understood. Okay. Me too.</p> <p>22 MR. RAMSEY: And, you know, I really do</p> <p>23 think I'm almost done. Let me take five and caucus</p> <p>24 with Mr. Uriarte, and I'll make sure -- I'm sure</p> <p>25 I'm forgetting something that he'll remind me.</p> <p style="text-align: right;">Page 211</p>	<p>1 Q. (By Mr. Ramsey) And you mentioned that at</p> <p>2 some point along the way there was a -- an open</p> <p>3 source -- open JDK license that came into being, true?</p> <p>4 A. Yes.</p> <p>5 Q. Now, you don't -- you haven't examined</p> <p>6 every one of those licenses to the APIs in</p> <p>7 producing your opinions; is that true?</p> <p>8 MR. KWUN: Objection. Form.</p> <p>9 THE DEPONENT: I have not.</p> <p>10 Q. (By Mr. Ramsey) Okay. So you've not</p> <p>11 expressed an opinion whether Google was allowed to copy</p> <p>12 all of the header lines, all of the declarations, in</p> <p>13 the 166 APIs in Java in a way that was consistent with</p> <p>14 these licenses, right?</p> <p>15 A. No, I did not base my opinion on those</p> <p>16 licenses.</p> <p>17 Q. Okay.</p> <p>18 MR. RAMSEY: I think that's all I have.</p> <p>19 MR. KWUN: All right. I -- I think I</p> <p>20 just have one or two questions for Dr. Cattell.</p> <p>21 And just, if you can try to remember that</p> <p>22 the -- almost just pretend that Mr. Ramsey is</p> <p>23 asking you these questions --</p> <p>24 THE DEPONENT: Okay.</p> <p>25 MR. KWUN: -- and that way you can look</p> <p style="text-align: right;">Page 213</p>